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## Manufacturers' Record.

RICHARD H. EDMONDS, President.  
THOMAS F. GRASTY, Vice-President.

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### A WORD WORTH A GREAT DEAL.

Mr. R. H. Stockton, chairman of the press and publicity committee of the St. Louis Exposition, writes to the Manufacturers' Record as follows:

Permit me to thank you in the name of the press and publicity committee of the Louisiana Exposition for the very extended, elaborate and thorough review of the World's Fair to be held here in 1904.

I have carefully compared your matter with that of many others that we have received, and find that there is absolutely no comparison whatever in the manner in which you have laid the matter before the people with that of many others.

A good word from your journal is certainly worth a great deal to us, and again we offer you our thanks for what you have done for us.

### TRAINING IN DOING.

The movement in the South for technological training seems well under way. Three or four institutions are steadily raising their standard and increasing their facilities, and if the spirit now prevailing be not diminished the next few years will probably see in successful and beneficial operation at least one great school of technology below the Potomac. In the meantime there is a pressing need for another class of schools to train the youth to do things. Engineers are now demanded in many quarters, and the demand will continue, if, indeed, it will not increase, for many years. But the engineers are to be the leaders or directors of a vast developmental work requiring an army of skilled workmen. The individuals for this army are at hand, but the means to drill them must be provided in the shape of trade schools or manual-training schools, where, in courses of three or more years, the white boys may be instructed in the crafts. A few cities have such institutions, either on an independent basis or as parts of the public-school system, but these are by no means doing the work that is needed for the great mass of white boys. Every town of 2000 inhabitants at least should have some such provision,

and the boys should be encouraged to take the training.

In more than one instance the mechanical college in the South has heretofore been merely a duplication of the average secondary school or low-grade college, with the military drill as a distinguishing feature. Designed to train to agriculture or mechanics, they have rather encouraged young men to seek professional careers under the old-time influence which drew a false distinction between occupation in the so-called professions and productive effort. Recent years have wrought a change, but the old misleading influence still persists, though with steadily diminishing force. Young men have learned that the path to honor and profit leads through other professions than the law, medicine and pedagogy, and where a few years ago there was hesitation about embracing a technical career there is now an enthusiasm beyond the means for its satisfaction. The revolution was rather sudden. It only required the son of a family long identified with the learned professions to enter upon the preliminary workshop life in preparation for a technical profession for other young men to throw aside all their false notions about the matter. But a similar hesitation is still manifest among the masses whose chances for a technical professional career are very slight, but who, nevertheless, regard working with the mechanic's tools as something beneath them. Even here the spirit is declining, and it would quickly disappear with the establishment of trade schools and the encouragement of the products of those schools by employers of labor.

In other parts of the country much of the work which is to be done efficiently in the South is in the hands of elements of foreign origin. This was not always the case. The workmen in occupations requiring more or less skill were once Americans almost exclusively, and where the number of these has comparatively diminished it is because their skill has enabled them to pass from the ranks of the employed to those of the employer. They are graduates of the most practical and effective school in the world—experience. The industrial life of the South has really only begun. Achievements of individuals have been wonderful. But the mass of whites of that section, to become as successful as Americans elsewhere, must pass through the same school as that which has made others proficient. They cannot change instantly from an agricultural folk, with its relative independence even for the small landholder, to the independence of the employers of alien labor. They must work for others, and the better skilled they are to perform work the sooner will their section attain its rightful position and they or their children their proper standing for usefulness. The manual-training school or the monotonic scheme will be the great power to bring about the needed transformation.

### SETTLING IN THE SOUTH.

Figures of the census of 1900 compared with those for 1860 indicate that the restlessness of the white population of the South apparent at the earlier date is diminishing, and that not only are Southerners remaining more closely at home, but that a greater number of whites from other sections are moving to the South. The following table shows at a glance the situation in 1900:

WHITE NATIVES OF THE UNITED STATES IN THE SOUTH.			
States.	In State of nativity.	Born in other Southern States.	Born elsewhere in the U. S.
Alabama.....	324,119	142,013	20,682
Arkansas.....	609,482	199,413	121,494
District of Columbia..	83,546	48,488	39,978
Florida.....	185,451	69,389	23,236
Georgia.....	1,062,145	98,917	18,211
Kentucky.....	1,625,221	85,868	101,087
Louisiana.....	588,510	67,078	22,171
Maryland.....	747,934	42,963	68,383
Mississippi.....	533,127	39,243	11,205
North Carolina.....	1,201,619	48,632	8,308
South Carolina.....	511,887	36,645	3,904
Tennessee.....	1,328,893	145,236	48,471
Texas.....	1,514,262	578,847	155,979
Virginia.....	1,074,674	65,197	33,916
West Virginia.....	744,138	68,235	80,481
Total.....	12,625,008	1,786,189	758,136

WHITE NATIVES OF THE SOUTH IN THE UNITED STATES.			
States.	In State of nativity.	In other Southern States.	Elsewhere in the U. S.
Alabama.....	324,119	246,729	31,362
Arkansas.....	609,482	88,427	107,880
District of Columbia..	83,546	11,074	15,186
Florida.....	185,451	18,638	6,542
Georgia.....	1,062,145	246,546	32,943
Kentucky.....	1,625,221	121,504	339,044
Louisiana.....	588,510	57,274	23,426
Maryland.....	747,934	40,759	136,333
Mississippi.....	533,127	180,975	26,850
North Carolina.....	1,201,619	141,155	52,781
South Carolina.....	511,887	106,384	13,283
Tennessee.....	1,328,893	300,858	164,122
Texas.....	1,514,262	41,094	141,368
Virginia.....	1,074,674	170,560	165,630
West Virginia.....	744,138	25,311	90,341
Total.....	12,625,008	1,786,189	1,847,121

Comparison with 1860 may not be made absolutely, as the census for that year for nativities of the population dealt with native free population, which included the free negroes. These, however, were an inconsequential element in the total, and in use for comparison make no material difference in the general results. The figures for 1860 are as follows:

FREE NATIVES OF THE UNITED STATES IN THE SOUTH, 1860.	
In State of nativity.....	5,328,333
Born in other Southern States.....	1,226,294
Born elsewhere in the United States.....	244,071
Total.....	6,798,698

FREE NATIVES OF THE SOUTH IN THE UNITED STATES, 1860.	
In State of nativity.....	5,328,333
In other Southern States.....	1,226,294
Elsewhere in the United States.....	924,235
Total in the United States.....	7,478,862

At first blush the figures for 1900 do not appear to be especially promising for the South. For instance, the fact that of 15,758,318 white natives of the South 3,133,310 have moved from the State of their birth reveals a restlessness which, viewed by itself, might be discouraging. Yet that restlessness is less than that prevailing in other parts of the country, and much less than it was in the South forty-odd years ago. The exiles of the South represent 19.8 per cent. of the total natives of that section, while those of the whole country represent 21.8 per cent.; of the country outside the South, 23.7 per cent., and

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 72 and 73.

New England, 23.4 per cent. Moreover, the proportion of natives of the South absent from the State of their birth in 1860 was 28.7 per cent. In the South, Arkansas, the District of Columbia, Louisiana and Texas alone show in 1900 an increase in this absenteeism over 1860. In the case of the three States this is explained by a natural persistence of the pioneer spirit, and in that of the District of Columbia by the shifting of

a considerable element of its population with every change of administration.

When this government was formed all the States had an immense back country offering opportunity for a satisfaction of the roving instinct characteristic of men of English stock. The opportunity had been seized in colonial days, and with the influx of other peoples after the Revolution and the development of somewhat different social orders North and South, it was hastened during the first half of the last century. The Southern migration paralleled that of the North, and mingled with it in creating new States in the Middle West. Though the movement has continued for more than a century, and though Southern-born are widely scattered, 226 of them, for instance, being found in Hawaii and 917 of them in Alaska, it is rather interesting to note that the great bulk of the migration to regions outside the South has been directed to comparatively few States and Territories, 1,150,926 of the 1,347,121 in 1900 being found in eleven States and four Territories, as follows: Missouri, 239,300, with 22,575 in St. Louis; Indian Territory, 156,657; Illinois, 130,049, with 24,625 in Chicago; Ohio, 113,700; Indiana, 104,389; Pennsylvania, 89,289; Oklahoma, 76,899; Kansas, 71,501; New York, 44,993, with 32,446 in New York city; California, 41,907; Iowa, 29,186; New Jersey, 15,865; Delaware, 13,942; New Mexico, 13,492; Arizona, 9762. There has been a gradual decline in the drift toward Missouri during the past twenty years. The large

proportion in the trans-Ohio States is largely a survival of an important movement before the war; the comparatively large proportion in Philadelphia and New York is a result of post-bellum influences, while the comparatively small number in New Mexico and Arizona and the large number in Indian Territory and Oklahoma point toward a slackening of the general migration within a comparatively short time with the exhaustion of what are known as the fresh lands and a realization of agricultural and industrial opportunities close at home. One consequence is that the proportion of Southern-born living outside the South has decreased since 1860 from 12.3 per cent. to 8.5 per cent. Another is that the proportion of men born elsewhere to the whole white native population of the South has increased from 3.5 per cent. to 4.9 per cent.

The very fact of a stronger inclination on the part of Southerners to remain in their native State is an encouragement for men born elsewhere to move to that more favored section. The influences to restlessness on the part of the Southern people served at the same time to deter any considerable movement to the South of the whites of other sections. These influences are passing rapidly, and the inevitable result is foreshadowed in the figures of the census.

#### PREMATURE FOREVER.

Not long ago a member of the Southern Education Board wrote an article in exposition of his view of the purposes of that Board. Following is the skeleton of his argument:

Northern men \* \* \* and Southern men \* \* \* agree absolutely both with regard to aim and with regard to method. They stand on identically the same platform as to the education of the races, and the platform is this: that both races should be treated alike. The Southern men \* \* \* stand squarely for the same training for the blacks as for the whites, etc. \* \* \* Those that find differences and provoke controversies are either not informed, or they are not representatives of the dominant feeling \* \* \* for the furtherance of education without regard to sex or color.

This position has been contested by Southern men, and though taken by a man born in the South, is hardly representative of the dominant feeling there among men who have witnessed the baleful effects of attempts to give both the blacks and the whites like education. They do not stand squarely for the same training for the blacks as for the whites, and certainly they will not assent to the suggestion in an editorial in the July issue of Country Life in America, written or inspired evidently by the enthusiastic member of the Southern Education Board. The suggestion is found in the following paragraph:

The North set to work to reconstruct the nation. The problems were new. The measures were not always successful, nor even creditable. The North, too, often made the radical mistake of trying to force its own opinions on the South. In outward form, reconstruction came quickly. But the ante-bellum social and political ideals were still paramount, and an ignorant race, without distinct ideals, was suddenly given its freedom and was thrown bodily on the overburdened and depleted South. Northerners, burning with democratic and missionary zeal, took up the education of the negro, often preaching at the same time a gospel of political and even social equality which was ill-considered and premature, neglecting almost entirely the great mass of the ignorant whites. This served often to intensify the popular feeling against free education for all the people of the South. Gradually, however, the people of the North and of the South became better acquainted. Capital went into the South. Railroads were built. At last manufacture began to arise—one is

now struck with the brand-new brick cotton mills along the Southern railroads. Slowly a feeling for popular education has arisen. This feeling has now spread all over the South, and has settled into a deep conviction. Statesmen feel the movement, and have espoused the cause. It is a fundamental awakening, the most important State-building movement of our generation. It touches the very heart and core of every social, economic and political question. The South—with some of the purest American stock now left to us—is to be revitalized and rebuilt from the inside. This is the real reconstruction. This is the new South.

In the main this paragraph is a fair resume of the events and tendencies of the past thirty-five years. No one, however, save an a priori theorist or an ardent convert to decadent doctrines, will at this late day discover either accuracy or wisdom in the clause, "a gospel of political and even social equality which was ill-considered and premature." In connection with the talk of training blacks and whites alike, and the furtherance of education without regard to sex or color, the word premature in this clause has the meaning, "happening, arriving, performed or adopted before the proper time; too early." The implication seems to be that the preaching of social equality of the black and white races was not fundamentally wrong, but was too early, and hence that the time may come when it would be perfectly proper, well-considered and timely. If that is the view entertained by the Southern Education Board as a body—and an insistence upon a like training for blacks and whites gives color to a belief that such is the ultimate aim of this movement, even though individual members of the Board may not perceive it—it seems about time for the people of the country at large, recognizing the ills which have come to both races with every attempt to place them on the same plane, to demand something more than mere generalities or deftly-worded phrases about this undertaking. It is, to be sure, one of private individuals. Nobody has a right to prevent, except by moral suasion, any of its members from talking or acting as he chooses. But if the results of the Board, however sincere the purposes of its members may be, are to be disastrous for the country, every move by it should be strenuously contested. The preaching of the gospel of social equality of blacks and whites anywhere will always be premature. Regard for both races, and especially for the blacks, should discourage even the slightest intimation of such a possibility.

#### COTTON AT KANSAS CITY.

Announcement of the plans of the Kansas City Cotton Mills Co. points to a development in the Southern textile industry as logical as it is encouraging. The company, which will have an authorized capital stock of \$10,000,000, proposes to establish a mill community upon a tract of about 2000 acres of land within fifteen miles of Kansas City, Mo. The mill building is to be of a size to accommodate 500,000 spindles, 12,000 looms, with necessary opening, intermediate and finishing machinery for making plain sheetings running from 2½-yard drills, made from yarns Nos. 8s to 20s, up to print cloths, and four and five-yard sheetings from yarns Nos. 30s to 50s, so proportioned as to cover all of the general needs of the Kansas City and other Western markets. The capacity of the mills will be sufficient to consume 170,000 bales of cotton a year, about one-tenth of the present annual takings of all the Southern mills, and to produce 75,000,000

pounds of finished cloth. The mills will require 4800 operatives. That is the ultimate plan, though the purpose now is to start operations with 50,000 or 100,000 spindles and to get everything running smoothly while additional building is under way and additional machinery is being installed. Hence, it has been considered best to take subscription at present for only \$5,000,000 and to erect a building and to provide the machinery instalments upon the plans laid out for the completed mill. It is announced that Mr. W. B. Smith Whaley of South Carolina, with New England associates and Western capitalists, have already subscribed for \$3,100,000 of the stock.

The development in recent years of cotton-growing in Indian Territory and Oklahoma, with the certainty of a wide extension of that culture there, has made inevitable the rise of cotton manufacturing close to that source of raw material and to the supplies of fuel not far away to meet the growing markets of the greater Southwest. The Kansas City project can be regarded only as a complement of the expanding industry in the South.

#### A BIG AUDITORIUM.

New Orleans Business Men to Push the Project.

[Special Cor. Manufacturers' Record.]

New Orleans, La., July 1.

The big shops of the Southern Pacific Company, which are located in Algiers, a suburb of New Orleans, are a scene of greatest activity these days, all the company's engines there being equipped with storage tanks and burners. Every passenger and every freight engine on the Southern Pacific lines from New Orleans to San Francisco will have the necessary fixtures attached for the burning of fuel oil as soon as a large force of machinists can accomplish that result. Already the passenger locomotives have been equipped with such machinery, and the freight engines are now being taken into hand. This work of converting the coal-burning locomotives into fuel-oil burning is not being prosecuted in the Algiers shops entirely, but in the shops of every division between this city and the Pacific-coast terminus of the road.

The question whether or not streets can be satisfactorily sprinkled with oil or not will soon be fully demonstrated in this city, thanks to the public-spiritedness of Mr. James T. Hayden, president of the Whitney National Bank, who is now conducting some interesting experiments on Louisiana avenue, in front of his palatial residence, and to Mayor Paul Capdevielle and President Mehle of the city council.

The many manufacturers the country over will be interested to learn that a great auditorium to hold 20,000 people will be completed in this city in time for the next annual convention of the National Manufacturers' Association. The Progressive Union took the matter up and pushed it along until now the project is assured. The Progressive Union committee responsible for the success of the enterprise is one composed of Messrs. Louis P. Rice, J. B. Sinnott, A. R. Blakely, Hart D. Newman, Hugh McCloskey and Charles Janvier. The incorporated company to handle the scheme is also made up of Progressive Union members, among whom are the president of the Union himself, Mr. M. J. Sanders, one of the leading public-spirited men of this city. The incorporated concern is entitled the New Orleans Auditorium Co., Limited. It has a capital stock of \$300,000, divided into 300,000 shares of \$1 each. The new auditorium will be built on Canal street, in the very central part

of the city, where it can be reached by every line of street cars. As there are to be a full dozen of the largest national conventions of the Union held here next year, the hall will come into good service at the very start. The largest of these gatherings will perhaps be the Confederate Veteran Reunion.

It is intended that the horse show, the flower show, the dog show and various other attractions that hitherto have been rather inconvenienced because of the lack of suitable quarters, shall hold their annual displays in the big auditorium, and also that it shall be a prominent feature of all the Mardi Gras festivals, a place where the people can meet their king upon the occasion of his annual visit to his favorite capital.

#### Scholarships in the Georgia School of Technology.

There have been established at the Georgia School of Technology three scholarships by the late Aaron French of Pittsburg, Pa., which amount to a loan to the students enjoying them, and yet gives the student the benefit of a limited amount of money during his four years' course in the institution. The conditions are as follows:

1. The applicant must be at least sixteen years of age.
2. No one is eligible whose family pays tax on more than \$3000 worth of property.
3. Scholarships are to be awarded by competitive examinations in the following subjects:

Algebra—Through quadratics and radicals.

Geometry—Through plane.

English, including grammatical construction of sentences, composition or letter-writing, showing proficiency in spelling, punctuation and division into paragraphs and parsing.

4. The winner of the scholarship is to be paid \$125 per annum for four years, giving his notes for small amounts, payable after graduation, without interest.

It will be seen that this plan enables the scholarship to be self-perpetuating, and it will not lapse at any time unless the beneficiary or his family should become unable to meet the obligations. As the successful applicant is chosen by competition, his successful accomplishment of the course of study may be considered an assured fact.

The first scholarship was won in the fall of 1898, and the beneficiary, Mr. E. W. Klein of Atlanta, has just graduated, with credit to himself and the institution. His notes for money drawn out in 1898 are beginning to mature, and their payment will offer another young man the scholarship this fall. A new scholarship will also be contested for September 24 under the same conditions. The competition is limited to no State or section of the country, and deserving young men who have become rather proficient in the elementary subjects named are given two opportunities, which may result in securing a high-grade technical education in the leading technical school of the Southern States.

#### American Rice in 1900.

Reports from eighty establishments engaged in rice cleaning and polishing in twelve States show that the capital invested in 1900 was \$2,601,352, an increase of 25.4 per cent. since 1890; the number of wage-earners 651, and the value of products \$8,723,726, an increase of 30.3 per cent. There were grown in the census year in the United States 250,280,227 pounds of rice, Louisiana leading with 172,732,430 pounds, South Carolina second with 47,360,128 pounds, Georgia third with 11,174,562 pounds, and Texas fourth with 7,186,863 pounds.



# THE SOUTH AND THE ISTHMIAN CANAL.

By SENATOR JOHN T. MORGAN of Alabama.

[Written for the Manufacturers' Record.]

I would be glad to make a more complete answer to the inquiries of your letter of the 26th inst., relating to the canal which Congress has just voted to construct, but I am otherwise too much occupied to deal with the subject, except to state a few of the leading points that are now established.

Congress has voted \$180,000,000 to be applied to an isthmiian canal that is not yet located, and has provided against any possible failure of this fund by an issue of bonds if it should ever become necessary.

No other government has ever made such an appropriation for a work of a civil or commercial character to be located in a foreign country and intended only to foster commerce and to promote peace, civilization and progress in all Christendom, and ultimately to draw the other nations into the grand upward movement towards higher planes of development. Yet our action is not altogether altruistic.

This appropriation will never be repealed, and an isthmiian canal will result from its expenditure.

I am convinced that the canal will be located on the Nicaragua route. If it is not, my judgment will be at fault, but that should not disappoint any man who is willing to yield his opinions, in a great matter like this, for the sake of united, zealous and firm action by all who are determined to construct a canal. We have reached this point of agreement, and it establishes a canal on the one route or the other.

This great American movement to the front will seal the confidence of our people in the permanent establishment and success of the republic and in the incalculable prosperity of our country, while it will settle the confidence of all nations in our strength and good-will. It is the national expression of "the faith that removes mountains."

The best and most enduring consequence of this act of Congress is the inspiration to earnest and cheerful exertion that it will bring to those whose daily toil is the life of the world. It will make the rewards of labor certain, and the farms, the workshops and the homes of the toilers will be brightened with assured prosperity. Next to this effect will be the close association of the people of our ocean and Gulf coasts in commercial intercourse, and this is the most conservative force that belongs to free government.

The first great revolution that it will cause in the commerce of the world will be slow, but inevitable. It will transfer the clearing-house of the world's commerce from Liverpool to New York.

The hemisphere that is Christian from pole to pole, without any dissenting nation to provoke religious wars, is entitled to the lead in the march of civilization, and is now moving to the lead of the column. The removal of the isthmiian barrier clears the way, and the remainder of the movement will be a triumphal procession in which all nations will gladly join under the banners of peace.

The basis of the calculation as to the net earnings of the isthmiian canal is well established in the history of the financial operations of the Suez canal. That canal is 100 miles long, and cost \$150,000,000, including the enlargements. Its net earnings are distributed on the basis of the par value of the original stock, about

\$100,000,000. For twenty years the net earnings have been from 15 to 18 per cent.

The wealth of the area that supplies this income to the Suez canal is not one-half of that which is tributary to the American isthmiian canal. The logical deduction is that we can earn more money at \$1 per ton for tolls on shipping than the Suez canal can earn at the rate of \$1.50 per ton, and the result is a saving to the world of 33 per cent. of the canal tolls on the great equatorial belt of commerce.

This would be enough, but we are not constructing this canal for profit on an investment.

It is to be the regulator of the rates of transportation by land and sea, and in that way it is to enrich our people by protecting their productions and earnings against the blight of monopoly. This is the purpose of Congress, and this is the first occasion when it has had practical expression. To reach this result the struggle has been long and arduous, and the difficulties have been immense. The transcontinental railroads and the lines of ocean steamers, with the repressive efforts of the Suez canal, have at last failed to defeat the will of the people of the United States, and their day of obstruction is ended, never to dawn again.

The clouds passed by when the Clayton-Bulwer treaty was abrogated, and the new embarrassments presented by the Panama canal project will either be speedily settled, or we will turn to the certain and clear ground of the Nicaragua route, as to which there was never any doubt, either as to the engineering, the freedom of the title from all defects, the healthfulness of the country, or its advantages as to the length of voyages, or its usefulness for sailing ships and the consequent competition with the transcontinental railroads.

So the situation is assured, and every power is reserved to Congress to prevent mistakes or to correct any error into which we may fall.

A vigilant people will see to it that no stain is left upon the honor of the republic in dealing with this great subject. The Sault Ste. Marie canal is the best example of the benefits of a free waterway, and stands as a conspicuous monument to American skill and enterprise. It passes through its locks 36,000,000 tons of shipping in eight months of the open season, and the freights that support this vast fleet are drawn from a country that has three competitive lines of railroads. It is a region that is not more productive, and but little more extensive than Nicaragua and Costa Rica. Such a canal, backed by the commerce of the North Pacific with the North Atlantic will surely pass 10,000,000 tons of shipping through its gates annually, and that amount, at \$1 per ton, will leave at least \$4,000,000 net profit annually.

The Chicago drainage canal is the proudest of American efforts in canal construction, and the most honorable to its projectors and to the men who have constructed it without the assistance of any government. It is thirty miles long, cut through solid rock for a great part of its length, and cost \$30,000,000.

With such examples, all doubts disappear as to the construction of the isthmiian canal.

The reasons for the opposition of the transcontinental railroads to the construction of any isthmiian canal are shown in the following extract from a paper recently published in a Costa Rica newspaper (translation from La Presna Libre,

daily newspaper of San Jose, Costa Rica, dated June 16, 1902):

"United States Slavery of Maritime Traffic.

"New York, 13.

"The Pacific Mail Steamship Co. has just concluded an agreement with the railroad company of the Isthmus of Panama, by which the latter agrees to deliver to the Pacific Mail, exclusively, all the cargo coming from North America that is destined for ports north of the Isthmus on the western littoral of Central America." (North American Pacific ports also included.)

Such monopolistic arrangements have existed for more than twenty years, and have cost the people of the Pacific States nearly the whole net profit of their agricultural productions.

This chain is broken, never to be reinstated, and our people are free from that incubus. If the Nicaragua route is selected, their freedom is absolute. If the Panama route is selected, they will be greatly relieved.

I will not attempt a discussion now of many questions that enter into the choice of routes. However these may be settled, the irrevocable fact remains that the American people will construct a canal with the means now provided by law.

United States Senate, June 27, 1902.

## THE NEW ORLEANS VIEW.

Mr. Tom Richardson, secretary-manager of the New Orleans Progressive Union, writes to the Manufacturers' Record as follows:

"Your request that I should prepare an article relative to the benefits which will accrue to the South through the building of an isthmiian canal has just been received, and I regret that it is impossible for me to give this very important matter the attention that it deserves.

"The South and the West have favored for a number of years the Nicaragua as against the Panama canal, and this was especially true because it was believed that the nearer such canal could be to Gulf ports the greater the benefit would be to these same Gulf and South Atlantic ports and the contiguous country. But no matter which route is adopted, and Panama is now decided upon, no section of the United States will receive anything like the numerous benefits which will accrue to the South.

"The Panama canal brings all the ports of Western South America and Western North America three days nearer to New Orleans and other Gulf ports than the present route around Cape Horn. The transportation of the country will not be dependent upon railroads, and the waterway between New Orleans and Pacific coast ports is lessened 3000 miles.

"The people of the South have desired an isthmiian canal for many years, and the very fact that this great public improvement is decided upon gives our people that confidence which is certainly a capital within itself worth more than the direct investment of hundreds of millions of dollars.

"There are many great houses in London and New York which will be forced to either move to New Orleans or other Southern ports, or establish agents here, for certainly the South, through its ports along the Gulf and the South Atlantic, has advantage over every section of the world, which cannot be estimated in dollars and cents. Hundreds of articles have been written relative to the trade of the Orient, and certainly no one can deny but that this canal gives to the metropolis of the South, which is today the second port in the United States, an advantage over any other port in the world.

"In round numbers, the Panama route

is 135 miles shorter than the Nicaragua route, and it will cost \$1,300,000 less to maintain it annually. The time consumed by a vessel going through the Nicaraguan canal is thirty-three hours, while the same vessel can make its way through the Panama canal in twelve hours, a saving of twenty-one hours, and while the people of the South have generally favored the Nicaragua canal, I have felt for some time that the Panama canal would be decided upon."

## American Iron and Steel.

The Annual Statistical Report of the American Iron and Steel Association for 1901 is now ready for distribution. It will be found upon examination to embrace all the leading features of previous reports, and also many new features. The tables relating to our production of pig-iron have been greatly extended, and now embody many technical details that have never before been published. The department of the report which is devoted to prices has been enlarged to embrace the monthly prices of steel bars at Pittsburg in the last six years, complete and authentic quotations of the monthly prices of tinplates during the last six years, and the average annual prices of Conn. lvs. coke, as well as the annual shipments, from 1880 to 1901. A careful inquiry has been made concerning the per capita consumption of pig-iron in the United States in the decennial periods from 1850 to 1900, and the results of the inquiry are given. The recent rapid development of the iron and steel industries of Canada has justified an exhaustive inquiry into the present statistical position of these industries, and the results of this inquiry occupy several pages. The report closes with a fresh study of the world's production of iron and steel and iron ore and coal in 1899 and 1900, the last two years of the nineteenth century, and with British and German statistics for all these products for 1901. The statistical tables presented in this connection are the most comprehensive ever published by the association. The necrological record is continued for 1901 and 1902.

Full details are given in this report of the production of iron ore and the various forms of iron and steel in the United States in 1901 and immediately preceding years, the shipments of iron ore from the Lake Superior and other mines, the imports of Cuban and other iron ore, the production of coal and coke, the imports and exports of iron and steel and coal and coke, the imports of manganese ore, the prices of Lake Superior iron ore, the prices of iron and steel, the tonnage of iron and steel vessels built in 1900 and 1901, immigration in 1901 and previous years, etc. Full statistics are given of Bessemer, open-hearth, crucible and miscellaneous steel castings. Statistics of the production of tinplates from the beginning of the industry in this country are also given.

The report contains sixty-four pages, and is well printed on good paper. It will be sent by mail in a strong flat envelope to all who may order it, thus insuring its receipt in perfect condition. Price \$3 per copy. Checks and money orders should be made payable to James M. Swank, general manager, Philadelphia.

## Mexican Cement Factory.

Mr. V. Cascino of the City of Mexico writes to the Manufacturers' Record of a plan to establish a Portland cement factory with 50 or 100 tons daily capacity, to be operated by water-power. The cement, he writes, is to be made by a dry process from hard limestone and very soft coal containing iron oxide. The enterprise, he says, is headed by two Mexican capitalists.

## THE APPALACHIAN FOREST RESERVE.

By DR. C. P. AMBLER of Asheville, N. C., Secretary of the Appalachian National Park Association.

[Written for the Manufacturers' Record.]

During the past thirty years there has probably been no legislation in Congress which more materially affected any section of the Southeastern States than the passage of the Senate bill No. 5228 on the 24th of June. This bill provides for the purchase of a national forest reserve in the Southern Appalachian mountains, to be known as the "National Appalachian Forest Reserve." The measure has been agitated both before the public and before Congress by an association which was formed for this purpose three years ago, and has reached a point where the prospects are that the same will become a law before many months. This bill, now passed by the Senate, has also been favorably reported by the House committee on agriculture, and the friends of the measure claim that they have sufficient strength in the House to carry the same with an overwhelming majority when the opportunity time arrives for bringing the matter up. The appropriations made by the present session of Congress have already reached such magnitude that the many supporters of the bill doubt the propriety of pushing the matter to a vote before the adjournment this month, but claim that as the measure has now passed the Senate, as the President has sent a special message to Congress endorsing the same, and as the House committee on agriculture has favorably reported the bill, it certainly has the best possible chance at the coming short session.

The benefit to the South which will follow this legislation will be far-reaching in its character, and will be felt alike by the rich and the poor, by the mechanic and the agriculturist, by both the cotton manufacturer and the cotton planter. This measure will insure for all time to come the protection of the water supply of the Southeastern lowlands, which lands during the past ten years have been threatened with destruction, both by the failure of their water supply in summer and floods in winter.

Senator Pritchard of North Carolina, in his speech before the Senate on this subject, made April 25, produced government statistics showing that since April 1, 1901, to April 1, 1902, there had been a loss of \$18,000,000 by flood along the course of the rivers which have their headwaters in the region where it is now proposed to establish this national forest reserve. Senator Pritchard showed most conclusively that these floods were due to the denudation of the forests on the steep mountain lands, both by the lumbermen and the agriculturalist. The purpose of this bill is to prevent the destruction of the forests on the lands which should never be cleared. As lumber and agricultural lands have advanced in price during the past few years, many thousand acres on these steep lands have been cleared, with the result that only two or three crops could be raised on the lands cleared before the soil has been washed into the streams and valleys and the mountainsides rendered a waste. It is the purpose of this bill to reforest such wasted and abandoned lands, as well as to also prohibit the carrying out of such destruction.

During the past fifteen years thousands of acres of the river bottoms and valley lands along the foot of the Southern Appalachian mountains have been abandoned on account of the floods which sweep these valleys; thousands of acres which were formerly the best cotton lands are now buried under sands and detritus

from the mountain country. If the next decade is to see these floods increased in proportion in their destructiveness as they have in the past few years, the fairest portion of many of our Southern States will be practically ruined. The passage of this act at this time is urged by the promoters of this cause for the purpose of preventing an increase in the volume of these floods, and with the hope that when such mountain-sides as have already been cleared have been reforested, that this terrible destroyer of flood and sand may be stayed. The experience of France, Spain and Switzerland proves that it is only by such measure that the destruction of the lowlands may be prevented.

Senator Pritchard in this speech above-mentioned produced government statistics showing that the water-power of the streams flowing out of these mountains where it is proposed to establish the national forest reserve had available 1,000,000 horse-power, and that up to the present time only 60,000 horse-power had been developed. A few years ago North Carolina had never been heard of as a manufacturing State; today she takes the lead in the number of cotton mills, and many of these manufacturers are preparing at this time to equip their plants with water-power, while some others hesitate against taking this step, for the reason that they are fearful both of the floods and the low waters which appear concomitant with the destruction of the forests in the mountains above.

The past few years have clearly shown that the South has before it a great manufacturing future, and that this 1,000,000 horse-power flowing out of the mountains in the Southern Appalachian region (if the streams are protected by government supervision at the headwaters) will, during the next few years, to a great extent be harnessed and producing the bulk of cotton goods which go to supply the demand of the world.

In the lowlands of North Carolina, where over one-half of the surface has been cleared and is now under cultivation, there have for many years back been many water-powers in use for manufacturing purposes. During the past few years, as the mountains have been cleared up, these water-powers have failed; and, whereas, in the past these water-powers have been on comparatively small streams, the same reasoning holds true as to the larger rivers in the future.

The gathering of tanbark has grown to immense proportions throughout the hardwood regions of the South. Almost every side-track in the entire hardwood region of the Southern Appalachian mountains contains box cars, which are being loaded with tanbark. This tanbark is bringing from \$3 to \$6 per cord, while the trees from which it has been stripped are rotting on the ground where they were felled. The government proposes that this wholesale waste shall not go unchecked.

As the larger forests in the North and Northeast have disappeared the lumbermen have turned their attention to the Southern hardwood forests. The largest operations being carried on in these mountains today are being done by foreign capital. These corporations are now in the field for the money there is in it; they have no thought and care nothing for the future of these mountains. If by stripping the land absolutely bare they are increasing their proceeds, then that is the policy.

The bill which is now under consideration

in Congress does not necessarily work any hardship for any lumber corporation, but it provides that the lumber operator shall carry out his work on a scientific basis and under government supervision. It provides that the young and growing timber shall not be destroyed in marketing the mature and ripe trees; it also provides that any person owning timber lands shall be allowed to carry on lumber operations, provided he conducts these operations under government supervision and sanction.

It is the purpose of the government that this great garden spot and recreation ground of the South; this region which has probably the finest climate to be found anywhere in the whole Southeastern section, shall not become a region of stumps, as has been produced by the selfish short-sighted lumbermen of the Northern States, particularly in Michigan. The government takes the position that this destruction and devastation should be prevented for the benefit of the people of the whole Southeastern section, and, if necessary, would even condemn the land and seize it for the purpose needed in cases where the owner persists in the wanton destruction of the mountain forests, and refuses to sell to the government at a reasonable figure.

The Appalachian National Park Association, with headquarters in Asheville, N. C., has been instrumental in having this matter brought to the attention of Congress, and has also secured special legislation in North Carolina, South Carolina, Georgia, Alabama, Tennessee and Virginia, ceding to the national government the right to acquire title to such lands as are desired and exempting the same from taxes. This means that all these States thoroughly understand the gravity of their present position, and while any State should hesitate toward ceding a large track of its territory to the national government and exempting the same from taxation, these States have, nevertheless, realized that it is only by doing this that they will be able to protect themselves from their own destruction, which now stares them in the face, both in the mountains and in the agricultural lands.

The final passage of this act by Congress will certainly stimulate and encourage the manufacturers who are locating their plants along the rivers which rise in the Southern Appalachian mountains to equip the same with water-power. It will also encourage not only those who have already located their factories, but will stimulate others to locate on these streams where water-power is available.

For years back it has been one of the cherished dreams of every citizen living in the extreme South to spend at least a portion of the hot months in some part of the Appalachian mountains. Here they find an ideal climate, fishing, hunting, camping and scenery which compares favorably with any to be found in the world. These mountains are the recreation grounds of the Southern people. Every Southern man should endorse the present administration for its effort toward guarding this great section of beautiful country against the inroads of the lumber vandals from other sections who have not a care for the future of our country, and every person who is engaged in agriculture south of the Mason and Dixon line, from the Mississippi to the Atlantic, should realize that this pending legislation will indirectly affect every crop that he plants, and as time goes on will still be far-reaching in its benefits to all Southern people, both those of today and their descendants.

If we destroy the timber in our mountains we also cripple the agricultural lowlands both by flood and drought.

### South African Trade.

The London Daily Mail calculates that for the rehabilitation of South Africa, devastated by war, millions of dollars must be spent. For mining machinery alone the outlay within the next five years will probably reach \$145,990,000. At least 100,000 homes will have to be rebuilt, there will be a keen demand for agricultural machinery, and a good market for railroad material of all kinds. The Mail thinks that America is to be reckoned with by Great Britain more seriously than Germany in the most profitable fields in South Africa. It finds that Americans are particularly favored in the mining field, where quite 75 per cent. of the drills used are of American make. Moreover, two great breweries costing between \$975,000 and \$1,459,000 are being built in Johannesburg and Cape Town with everything but the bricks from America. The plans for the Cape Town brewery were drawn in New York, the structural material came from that city, the copper coolers from Cincinnati, the filters from Milwaukee, the cookers from New York and the brewing machinery from Chicago. Even the carpentering work is to be done by a Staten Island firm. The Mail thinks that America seems likely to win in structural steel, and that the greater part of the orders for railway material will be divided between Belgium and the United States, the Cape Town government already having shown great favor in this particular for America.

### Big Oil Contract.

The oil-tank steamer Julia Luckenbach, which has a carrying capacity of about 25,000 barrels of oil, has been completely rebuilt, and is now about ready to begin delivering oil. She is under a long-time charter with the Texas Oil & Pipe Line Co., which has sold to the Standard Oil Co. for delivery at New York, Philadelphia or Baltimore the entire capacity of this steamer for one year. This will probably be about 400,000 to 500,000 barrels, as she is expected to make between fifteen and twenty trips a year.

### Oil Tankage at Beaumont.

Statistics compiled at Beaumont show that the iron tankage for oil there is 5,813,500 barrels, earthen tankage 4,225,000 barrels, and wooden tankage 192,500 barrels, a total of 10,231,000 barrels, while the amount of oil in storage is 5,450,000 barrels.

A dispatch from Beaumont, Texas, states that the June shipments of oil from that point amounted to more than 1,200,000 barrels, the largest amount shipped in any month since the field was opened. During the month the water-shipping facilities have been increased.

### With High Standards.

[Baltimore Telegram.]

There is no publication that has done so much for the past two decades to advance and develop the capabilities, facilities and resources of the South, especially, as the Manufacturers' Record. Its owners, publishers and editors are all practical men, enthusiastic in their work, who discuss every question concerning manufacturing and industrial interests upon a basis of entire reliability, and the information in its columns is ever authoritative and applicable. Such a publication as the Manufacturers' Record will deserve the substantial success and wide confidence and reputation it has attained. It is conducted upon such standards as keep it always to the front as an exponent and supporter of every legitimate and worthy interest in every direction of American production, capital and enterprise.



## AWAKENING TO NEEDS OF SOUTHERN BOYS.

Following are editorial expressions of newspapers in different parts of the country revealing the deeply-rooted and widespread interest, especially in the South, in the proper training of the white boys of that section to meet the industrial tasks before them:

### Lesson for the North.

[New Bedford Evening Standard.]

In an address at the commencement of the Georgia School of Technology Richard H. Edmonds, editor of the Manufacturers' Record of Baltimore, returned to his striking idea, which he has expressed on a previous and similar occasion, that the boys and girls of the South are its greatest raw materials. Speaking of his section of the country, he says: "Earth has no duplicate of the wealth of nature's bounty to us, but great as is the wealth of all our unmeasured raw materials, it is in value but as a grain of sand upon the seashore compared simply with the economic value of our boys and girls." Mr. Edmonds, speaking in the interest of technical education, naturally and properly places emphasis on the economic value of the children—a value which, while not their only value, and perhaps not their principal value, is scarcely appreciated even by many to whom the truth should be most familiar. \* \* \* Mr. Edmonds' appeal to the South is to train the boys and girls to do things, to use the schools as the factories which "shall turn out the most priceless product known to mankind—men and women equipped by training to develop every latent power to their own happiness and to the blessing of their country." Wisely balancing the boy as an economic factor with the boy as an intellectual and spiritual factor, this is a noble ambition. It is one which not merely the South, but which the North—New England, Massachusetts, New Bedford, to be definite—may well take as the motive of its effort. There is this to say from the practical side, that if Georgia and the South follow this impulse wisely and perseveringly, and that if Massachusetts and the North do not, they will increase while we will decrease, a consummation of which there is no necessity. The Baltimore editor has a vision of the future which may disquiet the timid among us, but which ought to inspire the bold. \* \* \* That the South will be more and more a competitor and a rival is evident, and the development of her industries must exert a powerful influence upon ours. So much is true; but it is also true that the gates of opportunity will still stand wide open. If we choose to have it so, the prosperity of the South will not diminish, but will add to our prosperity. We have boys and girls also to be raw material, as Mr. Edmonds puts it, for the conduct of our industries, and the richer the whole country the greater scope their capabilities will have. A South ten times as rich will buy ten times as many things, and if we make the things her people want we shall have their trade. We have no patience with the narrow theory, held by some men in both the South and the North, that the prosperity of one section means the ruin of the other. It means precisely the reverse, only providing that the people of both sections do not lose their industry and their enterprise.

All this reflection, suggested by the notably broad and comprehensive address of Mr. Edmonds, leads up to the application which concerns us people of New Bedford, whose chief industry is so closely related to what is certain to become a chief industry of the South. With

no disposition to in any way underestimate the effect of Southern competition on the manufacture of cotton goods in New Bedford, we have never believed that such competition spells ruin to our industry. On the contrary, it should signify advance, and we have a firm faith that it will. A score of years hence this city will not be making fewer cotton goods; it will be making more, and what is more to the purpose, it will be making better ones. But this prediction will go for nothing unless with clear vision and determined purpose we follow the counsel which the Southern editor gives to his neighbors—to take the boys and girls, our most valuable raw materials, and teach them how to do things. Not forgetting the higher life of the mind and the spirit, without which in the end the economic life will be a failure, our whole system of education should be broadly and definitely shaped to this end. Specifically, the responsibility is laid upon the public-school authorities, the managers of the textile school, and the trustees of every educational enterprise of every kind and description. Behind them, of course, to make their work effective, must be an alert and intelligent public spirit. This insured, there will be no occasion to dread the increase of Southern cotton mills; rather will such increase be welcomed.

### Success in Industry.

[Arkansas Gazette.]

The Georgia School of Technology, located at Atlanta, closed its scholastic year yesterday. There were twenty graduates, all bright young men, who have made rapid progress in their studies the past year. Some of the graduates will enter the cotton mills of the South, others will attend universities and colleges in pursuit of higher education, and some will follow mechanical engineering as a business.

The graduating exercises of this school were of the most interesting character. The commencement address of Mr. Richard H. Edmonds, editor of the Manufacturers' Record, was especially pleasing. It contained much substantial information relating to the industries of the South, and a great deal of wholesome advice of great benefit to this section if heeded.

Comparing the South's industrial progress with that of the East, he pointed out wherein the latter was far ahead of us, but in calling attention to the rapid advance made by this section in manufactures the past few years he presented convincing arguments which will afford much encouragement to those engaged in the development of the South's resources.

"Rightly have we boasted of our advance, rightly have we heralded to the world the story of our rise from poverty," he said, and added: "All honor to the men and women who have made this possible. All honor to the leaders who have blazed the way to victory. But let us bestir ourselves; let us awake to what we may now accomplish if we will only seize the opportunity. Let the story of what Massachusetts and Pennsylvania have done stimulate us to do greater things. The opportunity is ours. Shall we prove equal to it? We are in a machine age—an age in which the engine is really the measure of a nation's advancement. The past furnishes no counterpart of what our future is to be, for the past knew not the steam engine and all that is typified by it—the railroad, the labor-saving machine, the telegraph, the telephone, electric power, electric light and kindred things. This new age opens to men greater opportunities than were ever dreamed of before.

Talk about combinations restricting the chance for the future! Why, we have never seen possibilities such as await the man who is fitted to grasp the opportunities of the coming years. Talk about lack of opportunities! My friends, the time is coming, and some of these boys will live to see it, when the present industrial structure of the United States, with its 600,000 factories, its \$10,000,000,000 of capital and its \$15,000,000,000 of manufactured and mineral output, shall be duplicated in the South alone. Can you measure what it means to see within the next forty or fifty years the South's 93,000 factories grow to 600,000, its \$1,200,000,000 of manufacturing capital multiplied ten times, and the annual output of its factories and mines grow from \$1,600,000,000 to \$15,000,000,000?"

The young men who graduated from the Georgia School of Technology are well equipped to take care of themselves. They have received practical educations, and are prepared to walk out of the college room into well-paying positions. There is a demand for their services in every State in the Union. They know how to do things, and do them right, and these are the class of men that are sought after by every industrial institution in the country. There is need of more technical training in the South. We should have more schools where the youth may be taught to take care of themselves; where they may obtain such knowledge as will always enable them to secure profitable employment. The technical school supplies the foundation for success in the industrial world.

### Magic of Development.

[New Orleans Picayune.]

A few days ago, at the Georgia School of Technology, Mr. R. H. Edmonds, the founder and editor of the Baltimore Manufacturers' Record, delivered an address before the graduating class.

A school of technology is one in which the student learns practically, as well as theoretically, chemistry, electrical, civil and mechanical engineering. Fortunately, our own Tulane has an excellent technological department, and there are others well equipped and ably conducted in the Southern States. This should be so, for with the aid of the chemist, the electrician and the engineer these Southern States in which we live are going to be the richest region upon the globe.

Mr. Edmonds, who has already done a great work in promoting the industrial development of the resources of the Southern States, opened his address with these words: "The foremost scientist or philanthropist or the multi-millionaire is not so much to be envied as the boy who, equipped by education and industrial training, now stands on the threshold of his active life. Just as the scientist or the multi-millionaire is reaching the end of his journey the boy is starting on his. The possibilities of the forty or fifty, or, perchance, sixty years ahead of him are beyond all present wealth or fame. He enters the arena of activity in a period which promises to work marvels, compared with which the telegraph, the telephone, the electric light and all other wonders of the wonder-working nineteenth century shall pale into insignificance."

There is nothing rash in this prediction. It is founded on the experience of the past few decades, for the extraordinary and most inestimable gifts of science justify the expectation that her bounty, far from being exhausted, has been but just opened for the benefit of the human race. The Southern States, with inexhaustible mines of coal and iron; with stores of petroleum equally unlimited; with magnificent virgin forests containing more timber than is to be found in all the balance of

the republic; with almost unlimited water-power; with a soil remarkable for its fertility and a climate embracing every variation from that of the tropics to the best features of the temperate zone, the grandeur of the South's future is beyond conception, much less computation.

What is wanted to produce material wealth far beyond anything ever before realized is the magic of development under the hand of the chemist, the electrician and the mechanic. Why shall we be forced to send abroad for these magicians? Why shall they not spring fully equipped from our own Southern race? Some of the ablest of the economic scientists of the present day have sprung from our own Southern soil.

The chemist, the electrician and the engineer are the men who have revolutionized human methods, and have changed everything in manufactures, in mining, in transportation on land and sea—in fact, in all the arts both of peace and war. Thus it is science is the most potential of all the servants that are under the control of man, and no country on the earth so much needs her aid.

Then let the sons of the South court the aid of one that possesses the key to all the secrets of nature's wealth. The richest hoards are in the bosom of these Southern States, and the South's own sons should be foremost in exploiting them.

### For Self-Reliance.

[Newark Evening News.]

In his recent address at the commencement of the Georgia School of Technology Mr. Richard H. Edmonds made a logical and convincing plea for industrial training, which he evidently regards as the education most needed by the youth of the South. This is based largely upon a broad survey of the natural resources of that section, its coal, timber, iron, oil, cotton, etc., which furnishes him with an array of statistics that is truly inspiring. But it is when he indulges in comparisons between the industrial conditions and achievements of the South and other sections of the country that the logic of the situation impresses one with its greatest force. As between Pennsylvania and Alabama, for instance, two States of approximately the same superficial area, he finds that while the latter has more coal, more ore, more timber and probably greater agricultural possibilities, Pennsylvania has \$1,551,548,712 invested in manufacturing interests and turns out an annual product valued at \$1,843,790,860. Alabama's showing is not worth mentioning in the comparison. Indeed, Pennsylvania surpasses the whole South by \$400,000,000 in capital invested in manufactures and by nearly \$350,000,000 in output of completed product. In speaking of Massachusetts, only one-seventh the size of Georgia, he says: "Think of it and grasp its meaning to us as indicating the potentialities of the South's future; that the 2,500,000 people of Massachusetts can take our cotton, our iron, our coal and our timber, and, by the power of the technically-educated brain and hand, turn out manufactured products equal to those of the South, with its population of 25,000,000."

No doubt Mr. Edmonds realizes that the lack of a technical education is only one of several factors entering into the condition of affairs which he portrays, and the inference that it, and it alone, will remedy matters is hardly allowable. Its importance, however, is strikingly demonstrated in the statistics submitted, and that this demonstration is submitted by a Southern man to a distinguished Southern audience is a most hopeful sign of the times. There is a fine independence, too, in the speaker's contention that no finan-

cial assistance from outside is needed to inaugurate and carry on the training which he advocates. The people are prosperous, and that prosperity increases apace. They but need the same conception of the necessities of the case that begins to prevail elsewhere to forsake their antiquated notions of education and provide for their children a culture which will give them that mastery of the natural resources about them which will make the South potent in the industrial affairs of the world. Nature has been lavish with her gifts there. Man needs but learn how to utilize what has thus been placed at his disposal.

### Riches of the South.

[Lynchburg Advance.]

Perhaps no man living has done more to call public attention to the matchless natural resources of the Southern States than Mr. Edmonds, the editor of the Manufacturers' Record, a journal the object of which is to promote Southern development. Mr. Edmonds delivered an address the other day before the Georgia School of Technology on his favorite theme. In that address he marshaled facts and figures that cannot fail to arrest attention both at home and abroad.

He shows that the South has now 33,000 factories, but he prophesies of a time when these shall number 600,000; he finds we now have \$1,200,000,000 invested in manufacturing, but sees that this must be multiplied by ten; he shows the basis for his opinion that the output of our mines and factories will soon be worth \$15,000,000,000 instead of the present \$1,600,000,000. But the lesson he draws is for our present when he demands that we train our own boys to direct the further development of this natural wealth; that we grow our superintendents instead of importing them, and that we make a conscious and concerted effort to do this throughout by remodeling our schools. And at last he shows that we have gained something even more valuable than this material wealth in the years that have seen us emerge from the ruin of war and bad government. \* \* \* Mr. Edmonds strikes the true note in suggesting that our own young men ought to be trained to direct and control the manufacturing establishments and the mining enterprises that are springing up all over the country. The South will never attain to its rightful position of industrial independence or supremacy until she can furnish the men fully equipped and qualified to direct in every branch of industry. There is no lack of native talent and aptitude for business. The only thing needed is the technical training, and that Georgia is wisely seeking to supply by means of her school of technology, which has already abundantly demonstrated its usefulness.

### Profession or Trade.

[Rome Tribune.]

That was an able, impressive and comprehensive address delivered by Mr. Richard H. Edmonds, editor of the Baltimore Manufacturers' Record, before the Georgia School of Technology last week. He strongly favored technical education. \* \* We do not believe that Mr. Edmonds overestimates the importance of industrial education in the South. When these young men have had their technical training they are ready to step right into work. The youth educated for a profession, and not a trade, has a long wait for success. With present conditions he has a very poor opportunity compared with a boy who has a technical training. We need more industrially-educated young men. The industrial development of the South should be the great work of the twentieth century.

## RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### LOUISVILLE TO AUGUSTA.

**A Short Cut by a Proposed Railroad in Georgia.**

Regarding the proposed railroad from Louisville to Wrens, Ga., sixteen miles, Mr. W. L. Phillips writes from Louisville to the Manufacturers' Record as follows: "Wrens is a station on the Augusta Southern Railroad thirty miles from Augusta, and is fast building up. Only a few years ago it was an old field in the piney woods, but now is a thriving town with several good mercantile establishments, a large flouring mill which runs the year round, and also a planing-mill establishment with quantities of timber nearby. It is doing an immense business for so small a place. Louisville is the county-seat of Jefferson county, and is only sixteen miles south of Wrens, and the country lying beyond is splendid farming land built up with nice homes and prosperous farmers, with soil suited for the growing of almost any sort of crop known to this climate. Louisville is one of the oldest towns in Georgia, and one of the best. It has the distinction of being once the capital of the State.

"There is now no outlet from the town except by a branch road connecting with the Central of Georgia at Wadley, ten miles further south. So that with a road from Louisville to Wrens Louisville will be only forty-five miles from Augusta, whereas at present it is over 100 by rail. Augusta is the natural trading point for our people, as they used to go there in wagons before the day of railroads, but now Macon and Savannah get the trade, as they are more convenient to reach, though not any nearer. Macon is ninety-four miles and Savannah is 117 miles distant.

"With this road constructed we also have the Southern on one side and the Central of Georgia on the other, and we feel sure that when this link is built that it will sooner or later be consolidated and taken hold of by some of these large systems and be the shortest route between New York and Florida points. With a quick schedule to market truck farming will take the place of cotton, and ere long the whole face of the country will be changed from cotton fields to orchards and from farms to gardens indeed. Immense quantities of timber and wood line the road, and these alone will pay the line a good profit, leaving out other freight. Being also the shortest route from this section of the State to the East, we feel sure that passenger travel will be good."

Mr. Phillips also says that plans for building the line are not fully completed.

### GALLATIN WANTS A RAILROAD.

**Plan for a Line in Order to Obtain Coal via the Cumberland River.**

Mr. James W. Blackmore, mayor of Gallatin, Tenn., writes to the Manufacturers' Record concerning the plan for building a railroad from Gallatin to the Cumberland river. He says:

"The distance from the town to the river is three miles through a beautiful section of farming and residence country. There is a good turnpike all the way, over which an electric road could be built at comparatively small expense. The completion of the Tennessee Central Railroad into Nashville, with a branch road to Cumberland river, opposite Carthage, Tenn., seventy miles above Gallatin, and the opening of the coal mines in the timber section of the Cumberland plateau, suggested the idea of barging coal down

the river to Hartsville and Gallatin and the construction of a railroad from Gallatin to the stream with a view to getting the benefit of this means to supply coal and timber.

"The water-works plant of Gallatin, owned and operated by the town, is located on the river, and the electric-light plant, also owned and operated by the town, but now located here, would be removed to the river if suitable arrangements for obtaining coal by the stream could be made. These plants consume now about 1320 tons of coal annually, with the prospect of increased consumption, as new consumers of light and water will make demands for more power in each. The domestic consumption of coal in Gallatin is about 140,000 bushels per annum, and about sixty carloads of coal are also required yearly for three manufacturing plants in the town.

"What we wish to do is to enlist some parties with capital and practical experience to look into this project, and if it will pay, to have them undertake it. The people of Gallatin and vicinity will give all the material and moral aid and backing to the enterprise that they can."

### TUXPAN VALLEY RAILROAD.

**Another Proposed Short Line to Tidewater in Mexico.**

Mr. C. B. Eames of St. Louis, president of the Tuxpan Valley Railroad Co., Ltd., writes to the Manufacturers' Record as follows: "We have secured from the Mexican government a concession to build a railroad from Tuxpan for a distance of about seventy miles inland to connect with the Mexican Central on its extension now being built into Tampico. This road will run through the richest valley in the Republic of Mexico, and will be a valuable property when completed. The location survey is now being pushed, and we expect to commence building operations this fall from the Tuxpan end.

"It is understood that the Mexican government has signified its intention of having the bar opened just as soon as the railroad is built to this port. This will greatly enhance the value of property throughout that entire section, and put Tuxpan into direct connection with the balance of the civilized world."

The port of Tuxpan is on the Gulf of Mexico, about 150 miles northeast of the City of Mexico. The Tuxpan Valley road, it is stated, will connect with the Tampico road at or near Jabonera. A. W. Bartlett of St. Louis is secretary and treasurer. Mr. George W. Deits, the vice-president and general manager, is now in Mexico completing arrangements to begin construction. The company, which was incorporated under the laws of Delaware, has \$600,000 capital.

The building of this line will, according to those interested, make a short line to the Gulf from the City of Mexico, at the same time running through a rich country in which coffee-raising is now being extensively and successfully conducted.

### Southward Migration.

The number of families and single men that have been reported to the office of its industrial and immigration department as having settled on the line of the Nashville, Chattanooga & St. Louis Railway during the past eighteen months is a little over 750. It is believed that there are probably 250 families that have not been reported to the office. This does not include those who have settled in cities. The amount invested in farms is something over \$1,250,000. In addition to the farms purchased, there were many large tracts of timbered and mineral lands bought by immigrants that will aggregate 26,475 acres, worth about \$100,000.

There have been thirty-nine industrial establishments located on the line of this road within the same period. This does not include those that have located in the larger cities. Among the industries established is a cottonseed-oil mill, several saw-mills, grist mills, flouring mills, planing mills, gin, spoke, handle and hub factories, wagon factories, shingle, stave and hoop factories and furniture factories, iron foundry, lime works and fertilizer plants. The aggregate amount of capital invested in these various industries will reach probably \$2,500,000. The high character of the immigrants settling on this road is worthy of mention. All of them, with few exceptions, have money enough to buy and stock good farms. They are usually intelligent, industrious and energetic, and make the best of citizens.

### The Cape May Opening.

The annual excursion tendered by the Pennsylvania Railroad to the newspaper men of Philadelphia, Baltimore and Washington took place last week. The special train made up for the excursionists left Washington on Friday, taking up the Baltimore party on arrival in that city. At Philadelphia the usual sumptuous lunch was served at Broad Street Station, and after a 40-minute stop the train left for Cape May. The advent of this party, numbering about 400, marks the inauguration of the season at that famous resort. The entire party were handsomely entertained at the Stockton, and the comfort of the guests was looked after by Col. George W. Boyd, assistant passenger agent, assisted by Major Frank N. Barksdale of the press bureau of the Pennsylvania Railroad. Mr. Bernard Courlander had charge of the Baltimore contingent, and the itinerary, covering four days, was carried out to the letter. The Baltimore party held a meeting on Monday evening before leaving the Stockton Hotel, at which resolutions were adopted thanking the Pennsylvania officials in charge for their courtesy and attention during the trip.

### THROUGH "BREAKS OF SANDY."

**Chesapeake & Ohio Building from Kentucky into Virginia.**

The Manufacturers' Record has obtained from an authoritative source the following information:

"The Chesapeake & Ohio Railway, through its subsidiary company, the Big Sandy Railway Co., has commenced the construction of a line from Whitehouse, Ky., the terminus of its present Big Sandy branch, up the Levisa and Russell forks of the Big Sandy river to what are known as the "Breaks of Sandy," at the State line of Kentucky and Virginia, and thence through the "Breaks" into Dickinson county, Virginia, to the mouth of Pound river. This line will open up valuable coal territory and offer transportation facilities to a large and naturally rich country. Contractors are at work, and it will be pressed to completion as rapidly as possible."

This railroad will be between fifty and sixty miles long, and will extend in a southeasterly direction through Johnson, Floyd and Pike counties, Kentucky, and Dickenson county, Virginia.

### New Stockyards at Kansas City.

Dispatches from Kansas City report that Theodore Bates, representing Boston capitalists; the Kansas City, Mexico & Orient Railway and the Swift Packing Co. are interested in a plan to establish another stockyard at Harlem, opposite Kansas City, Mo. The packing company is reported to have purchased the Fowler plants at Kansas City and Chicago, and packing-houses will, it is stated, be



erected near the new yards to accommodate this concern. The yards will be about two miles from the plant of the Kansas City stockyards company.

Over a year ago Mr. Bates bought the stone piers erected about fifteen years ago by W. E. Winner, together with valuable terminals and land on both sides of the river. Since then he has purchased large tracts on the Harlem side, and has secured possession of a mile of water-front. The plan as described is for the Kansas City, Mexico & Orient Railway, now building, to bring cattle from Texas and Mexico to the new stockyards. The railroad company has also been buying land on the river.

#### To Connect With the Seaboard.

One of the gentlemen interested in the Rutherfordton, Hickorynut Gap & Asheville Railroad in North Carolina writes to the Manufacturers' Record confirming the report that the company has made a contract with Geo. F. Canis of New York and Baltimore. Continuing, the writer says:

"We hold a franchise for a road from Rutherfordton via Asheville to the Tennessee line. Mr. Canis has contracted to build about thirty miles of line, beginning at Rutherfordton and across the Blue Ridge to Fairview, which is about twelve miles from Asheville. Mr. Canis has gone to the expense of taking rights of way from Rutherfordton to Asheville. He has had an engineer on the line for a month, and we have better hopes that the road will be built than ever before. We have good reason to believe that the Seaboard Air Line will back the enterprise and cause the line to be constructed."

This proposed road will connect with the Seaboard at Rutherfordton.

#### Birmingham Railway Improvements.

Concerning the improvements under way and projected by the Birmingham Railway, Light & Power Co. of Birmingham, Ala., President Robert Jemison is quoted as saying that the new line from Birmingham to Ensley will be laid with ten inches of ballast, the cars will be heated with electricity and equipped with air-brakes and four 50-horse-power motors, the latter giving them a speed of thirty-five miles an hour. The Bessemer and Powderly dummy roads will be converted into electric lines. On all the city lines 90-pound rails will be laid. An order has been placed with the St. Louis Car Co. for thirty new cars. The capacity of the power-house will be doubled. A car shop covering half a block will be erected, and a car barn of equal dimensions will also be built.

President Jemison says that the company is also extending its gas plant, putting in eight or ten miles of pipe and proposing to increase the extension to twenty miles.

#### McMinnville to Nashville.

Advices from Woodbury, Tenn., to the Manufacturers' Record concerning the reported plans to build a railroad from McMinnville to Nashville are as follows:

"Charles M. Henley of Columbus, Ohio, is reported contemplating building an electric line from the Bon Air coal mines by McMinnville, Woodbury and Jefferson to Nashville, a distance of 100 miles. This road will go through the timber land of Cannon, Warren and Rutherford counties, and will traverse Stone's River valley from Warren to Davidson counties, also the bluegrass section of Tennessee, that furnishes pasture all the year for sheep and cattle, besides giving all local and passenger traffic from those counties to the Louisville & Nashville Railroad. An electric road will be thirty-five or

forty miles shorter than the present route, and will be nearly an air line from the coal fields to Nashville. It is reported that rights of way have been given, and that the construction is to begin immediately."

#### A Maryland Electric Road.

Mr. Hope H. Barroll of Chestertown, Md., writes to the Manufacturers' Record regarding the proposed Chestertown & Baltimore Railroad Co. of Kent county, Maryland. He says that the line is to run from Chestertown via Fairlee and Edesville to Rock Hall, with a branch from McClain's Corner to Tolchester Beach. The road, which is to be an electric line, is designed to furnish the people of Chestertown and vicinity with not only local transportation facilities, but with quicker transit to and from Baltimore, connection being made with steamers at Tolchester or Rock Hall. The gentlemen interested in the plan are Charles H. Barritt, Chas. H. Stoeber, Hope H. Barroll, Wilbur W. Hubbard and Wm. B. Copper.

#### Ohio Valley Traction Co.

Mr. M. I. Barker writes to the Manufacturers' Record from Carrollton, Ky., as follows:

"The Ohio Valley Traction Co. was organized and incorporated under the laws of the State of Kentucky June 17, 1902. The capital stock is \$30,000, and its purpose is to build an electric railway from Milton, Ky., opposite Madison, Ind., to Covington, Ky., or Cincinnati, Ohio, a distance of about sixty miles. Survey has been made and the right of way obtained for most of the distance. Officers elected are M. I. Barker, president; Col. A. S. Berry, vice-president; Judge J. A. Donaldson, secretary, and O. M. Wood, treasurer. The principal office at present is at Carrollton, Ky."

#### Brunswick & Birmingham Purchase.

The actual title to the Offerman & Western Railroad of Georgia passed to the Brunswick & Birmingham Railroad on July 1, and in about ten days the latter company will begin operating its line regularly between Nichols and Brunswick, a distance of nearly 100 miles.

#### Railroad Notes.

J. G. Metcalfe, general manager of the Evansville & Terre Haute Railroad, has been elected president of the Mexican International Railroad Co.

Mr. H. R. Nickerson, vice-president and general manager of the Mexican Central Railway Co., writes from Monterey, Mexico, to the Manufacturers' Record, saying: "No steps have yet been taken by this company toward building an extension to Saltillo."

Mr. J. F. Holden, general manager of the Choctaw, Oklahoma & Gulf Railroad, writes to the Manufacturers' Record that there is nothing in the report of extensions to be built to the Gulf of Mexico from Guthrie via Denison, Texas, and from Amarillo, Texas, to Albuquerque, New Mexico.

Mr. J. M. Barr, vice-president and general manager of the Seaboard Air Line Railway, writes to the Manufacturers' Record from Portsmouth, Va., as follows: "There is no foundation for the statement that this road has entered into arrangements for the erection of a union station and terminals at Norfolk. I do not think any road entering Norfolk is a party to the alleged arrangement."

During the first six months of this year there were erected at Atlanta 374 dwellings, an increase over the same period last year of fifty-nine.

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

### SOUTHERN MILL ADDITIONS.

**Increases in Equipment Announced During the Past Three Months.**

During the past three months the announcements of the undertaking of new cotton mills and the enlargement of established mills in the South have been more noted than in any other three months since the Southern textile industry received its great impetus more than a decade ago. The revived activity of this year will result in the great advance of the industry and the completion of the numerous plans made during recent months will give the South a more prominent position than ever. The Manufacturers' Record publishes below a table giving the names of the mills, their location and the extent of the new equipment by States. An examination of that table shows that by far the greater investments of capital in the industry are being made by experienced cot-

ton manufacturers. For instance, during the past quarter only sixteen strictly new mills were announced, with an aggregate of 128,500 spindles and 2570 looms, representing an investment of \$2,570,000. At the same time thirty-five established companies announced additions to their buildings, and an increase of 358,632 spindles, representing an investment of about \$7,000,000. The aggregate for the second quarter of the year is therefore nearly 500,000 more spindles and an investment of about \$10,000,000. Many of these mills and improvements are already under contract, and a number of them are being constructed. The tendency in Southern cotton manufacturing continues to be toward the production of finer grades of goods.

In addition to mill building and an increase in the equipment, several other notable undertakings have been announced. The most important of these was that of the \$2,500,000 company which proposes to establish bleaching and finishing plants at different points in the South, the first one to cost about \$200,000, soon to be built at Fayetteville, N. C. Another is that of the Proximity Manufacturing Co. (Moses H. Cone and his associates) at Greensboro, N. C., which, it is claimed, will be the largest denim factory in the world. Details of this were published in the Manufacturers' Record last week. Following is the table of additions of looms and spindles by States in April, May and June:

Alabama.		Spindles.	Looms.
Name.	Location.		
*Coosa Mfg. Co.	Piedmont	14,920	...
*Handley Mfg. Co.	Rocky Mount	6,000	...
Pell City Mfg. Co.	Pell City	12,000	390
*Enfauila Cotton Mills.	Enfauila	26,000	750
*Girard Cotton Mills.	Girard	6,000	100
New England capitalists (details not known yet)	Huntsville	20,000	...
3 new mills.		84,920	1,210
Arkansas.			
Monticello Cordage Mills (capital \$20,000)	Monticello	...	...
1 new mill.			
Georgia.			
*Massachusetts Mills in Georgia	Lyndale	41,000	...
Boyd-Mangham Mfg. Co.	Griffin	10,000	300
*Capps Cotton Mills.	Toccoa	...	45
*Kincaid Mfg. Co.	Griffin	3,500	130
*Canton Cotton Mills.	Canton	...	50
1 new mill.		54,500	545
Louisiana.			
Alexander Cotton Mills (capital \$75,000)	Alexandria	...	...
1 new mill.			
Mississippi.			
G. A. Wilson, president (capital \$100,000)	Lexington	...	...
Aberdeen Cotton Mills	Aberdeen	15,000	350
Roundaway Mfg. Co. (capital \$150,000)	Coalhoma County	...	...
Magnolia Cotton Mill Co. (capital \$100,000)	Magnolia	...	...
4 new mills.		15,000	350
North Carolina.			
*Proximity Mfg. Co.	Greensboro	60,000	2,000
*Proximity Mfg. Co.	Greensboro	...	200
*Coolidge Cotton Mills.	Coolidge	5,000	500
*Kester Mfg. Co.	Salisbury	...	300
Henry River Mfg. Co.	Hildebran	3,000	...
*Roberts Mfg. Co. (given April 3, but announces 2016 more spindles)	Rockingham	3,616	...
*High Shoals Co.	High Shoals	5,000	150
*Mooreville Cotton Mills.	Mooreville	...	100
*Erwin Cotton Mills Co.	Durham	35,000	1,000
*Lumberton Cotton Mills.	Lumberton	1,000	...
*Oberon Mills Co. (capital \$75,000)	Graham	...	...
*Hope Mills Mfg. Co. (finishing and bleaching plant)	Hope Mills	...	200
*Pilot Cotton Mills.	Raleigh	2,000	...
*Sanford Cotton Mills.	Sanford	...	200
*Golden Belt Mfg. Co.	Durham	8,416	240
*Monbo Mfg. Co.	Monbo	416	...
2 new mills.		123,448	4,990
South Carolina.			
*Cheswell Cotton Mills.	Westminster	5,000	152
*Tucapau Mills Co.	Tucapau	30,000	2,000
*Franklin Mills.	Greer Depot	6,500	250
*Grendel Mills.	Greenwood	2,000	...
*Clover Cotton Mfg. Co. (\$10,000 new mch.)	Clover	18,000	600
*Monarch Cotton Mills.	Union	11,250	300
*Chiquola Mfg. Co.	Honeapath	...	...
*Saxon Mills.	Spartanburg	12,500	300
*D. E. Converse Co.	Glendale	20,100	600
*Brogan Cotton Mills.	Anderson	25,000	800
*Glenwood Cotton Mills (given April 3, but announces 6320 more spindles and 112 more looms)	Easley	6,320	112
*Wm. Shoals Mfg. Co.	Laurens	25,000	...
Ninety-Six Cotton Mill	Ninety-Six	10,000	300
3 new mills.		171,760	5,414
Tennessee.			
*Knoxville Cotton Mills Co.	Knoxville	...	300
*Brookside Mills.	Knoxville	26,000	650
		26,000	950
Texas.			
Brenham Cotton Mills.	Brenham	5,000	160
Weatherford Cotton Mills.	Weatherford	3,500	...
*Cuero Cotton Mill.	Cuero	3,004	...
2 new mills.		11,504	160
Virginia.			
*Roanoke Cotton Mills (\$25,000 additional machinery)	Roanoke	...	...
16 new mills.		128,500	2,570
35 established mills.		358,632	11,019
Grand total.		487,132	13,619
*Established mills enlarging.			

### Kansas City Cotton Mills.

Messrs. Witten McDonald of Kansas City, Mo., and W. B. Smith Whaley, the well-known mill engineer of Columbia, S. C., will organize the Kansas City Cotton Mills Co. with an authorized capital stock of \$10,000,000, to construct and operate the cotton mill announced last May as proposed. A site of about 2000 acres of land, specially adapted to a manufacturing community and with ample railway facilities, within fifteen miles of Kansas City, has been selected as a location. The manufacturing plant will include the erection of one expansionable building of a size to accommodate 500,000 spindles, 12,000 looms, with necessary opening, intermediate and finishing machinery, all of the latest and most improved designs. The product will be plain sheetings, running from two-and-one-half-yard drills (made from yarns Nos. 8 to 20) up to print cloths, and four and five-yard sheetings (from yarns Nos. 30 to 50), so proportioned as to cover all the general need of the Kansas City and Western markets. It is proposed that operations be begun when 50,000 or 100,000 spindles are in position, and that the remaining spindles and other machinery be installed as rapidly as possible thereafter. The mill village will be provided with all the necessary facilities, such as water supply, electric lighting, improved streets, etc., for health and convenience. The directors will include Messrs. Edward F. Swinney, W. S. Woods, Edgar L. Scarritt and Henry C. Flower of Kansas City, John R. Mulvane, Edward Wilder and Joab Mulvane of Topeka, Kan.; Messrs. McDonald and Whaley; and four additional representatives of the Eastern stockholders. Eastern and Western capitalists, including New England associates of Mr. Whaley, have already subscribed for \$3,100,000 of stock and \$1,550,000 of bonds. Mr. Whaley will give his personal attention to the construction and operation of the plant. The company's offices are at 102 New York Life Building, Kansas City.

### Poulan Cotton Mills.

Poulan Cotton Mills, reported last week at Poulan, Ga., has effected temporary organization, with W. C. Vereen of Moultrie, Ga., president, and Columbus Alford of Willingham, Ga., vice-president. The company is capitalized at \$100,000, and proposes installing an equipment of 5000 spindles and 160 looms for the production of white goods. The exact character of this product has not been determined. At the organization meeting cash subscriptions amounting to \$35,000 were obtained, which, with building, boilers and engines available, forms about two-thirds of the capital. This balance will be readily obtained. The building acquired is an uncompleted one originally intended for a cotton mill. A picker-room will be erected, also other additional buildings, and there will be installed electric-light plant, fire-extinguishing apparatus and other equipment. A. K. Hutton of Detroit, Mich., who has lumber interests in this section, is largely interested.

### Cotton-Mill Dividends.

Numerous cotton-mill companies in the mill districts of South Carolina declared their semi-annual dividends on July 1. The mills in and around Spartanburg, S. C., declaring these dividends were as follows: Arlington Cotton Mills, 3 per cent.; Arkwright Mills, 3 per cent.; Beaumont Manufacturing Co., 3 per cent.; Clifton Manufacturing Co., 4 per cent.; D. E. Converse Co., 4 per cent.; Enoree Manufacturing Co., 2½ per cent.; Whit-

ney Manufacturing Co., 3 per cent.; Mary Louise Mills, 5 per cent.; Cowpens Manufacturing Co., 4 per cent.; Pacolet Manufacturing Co., 5 per cent.; Pelham Manufacturing Co., 5 per cent.; Spartan Mills, 5 per cent.; Tyger Cotton Mills, 3 per cent.; Tucapau Mills, 4 per cent.; Victor Manufacturing Co., 4 per cent., and Fingerville Manufacturing Co., 1¼ per cent. These dividends amounted to \$218,963.

### Textiles in 1900.

A census bulletin shows that in 1900 the number of cotton-manufacturing establishments in the country was 973, an increase of sixty-eight since 1890; the capital invested was \$460,842,772, an increase of \$106,821,929; the number of wage-earners 297,929, an increase of 79,053, and the value of the products \$332,806,156, an increase of \$64,824,432. Active spindles numbered 19,008,352, an increase of 4,820,249, and looms 450,682, an increase of 125,816. The bulletin dwelt particularly upon the great increase in the industry in North Carolina, South Carolina, Georgia and Alabama. The report shows that in the combined textile industries of the country there were 4312 establishments in 1900, with capital of \$1,042,997,577, and the value of the product was \$931,494,566.

### To Add Spinning Mill.

The Anchor Duck Mills of Rome, Ga., has begun the erection of a new building, to be two stories high, 100 feet long, for the accommodation of additional machinery. This company has increased its capital stock from \$50,000 to \$100,000, and during the week determined upon the improvements. It expects to install a carding and spinning plant in the additional building of about 3500 spindles. Heretofore the company has operated looms only.

### Textile Notes.

The Macon Business League of Macon, Miss., is promoting a movement for the establishment of a large cotton mill.

A report by the census bureau states that the amount of cotton ginned from the crop of 1901 was 9,954,945 bales.

E. R. Horton of Lowndesville, S. C., will probably build a knitting mill, and will want knitting machines, turbine wheel, steel flume, etc.

Granite Falls (N. C.) Manufacturing Co. has presented to its stockholders an annual report showing a profit of 11½ per cent. A dividend of 6 per cent. has been declared, and the remainder carried to surplus.

The mayor of Americus, Ga., has received a proposition from New York parties for the establishment of a \$90,000 knitting mill. He offers, on behalf of the city, free building site and tax exemption for a term of years.

Columbus (Ga.) Manufacturing Co. has received the final shipment of machinery to complete its equipment of 25,000 spindles and 800 looms, as originally planned. This machinery is being installed, and will soon be in position. The company started production of sheeting with 10,000 spindles.

Monarch Cotton Mills of Union, S. C., has declared a semi-annual dividend of 3 per cent., besides carrying a good amount to the surplus fund. The company also increases its capital from \$350,000 to \$500,000 to provide funds to pay for the 18,000 spindles and 600 looms being added. Full details as to this addition were given recently.

Magnolia Cotton Mills of Magnolia, Miss., has purchased fifty acres of land as site for its proposed cotton factory.

The organization of this company was recently announced, with capital stock of \$100,000. The details as to equipment, etc., have not been determined yet, but are now under consideration. Messrs. J. H. Price and L. L. Lampton are acting for the board of directors.

H. C. Townsend of Anderson, S. C., who announced several months ago his intention to build a cotton-twine mill, has incorporated H. C. Townsend Cotton Mill, to own and operate the plant. The equipment will give a daily capacity of 2500 pounds, employing about thirty-five hands. Nearly all contracts have been let, and Stuart W. Cramer of Charlotte, N. C., is the architect in charge. Electric-power will be used.

Crescent Hosiery Co. of Niota, Tenn., which was incorporated several weeks ago, has effected organization with H. M. Willson, president, and W. L. Forrest, secretary-treasurer. Contract has been let to W. R. Harvey of Cleveland, Tenn., for erection of building two stories high, 40x84 feet. In this will be installed sixteen knitting machines for the production of twenty dozen pairs of misses' and children's ribbed hose daily. The building will cost \$2500, and about \$10,000 more will be used to buy machinery and for working capital. The plant will employ thirty operatives.

The stockholders of Aberdeen Cotton Mills, Aberdeen, Miss., to which charter was issued recently, met during the week and elected directors. These directors are Messrs. W. W. Watkins, D. P. Holliday, W. M. Payne and W. G. Sykes of Aberdeen, and W. M. Stokes of Cordova, Ala. Mr. Holliday is chosen president. Mr. Stokes is of Cordova, Ala., and has taken \$85,000 of the stock for himself and associates. Local investors take \$115,000 of the stock, which makes a capitalization of \$200,000. The further details as to construction and equipment are now being determined.

### To Sell Two Furnaces.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., June 30.

The Tennessee Coal, Iron & Railroad Co. has about closed for the sale of its two furnaces at Oxmoor, in Jefferson county, Alabama, to a local syndicate headed by Mr. T. T. Hillman. The price is not stated. It seems to be the Tennessee Company's policy to concentrate its furnace operations, and this is probably the reason it is willing to sell the Oxmoor plant. The furnaces have been partially dismantled for some time, but it is said to be the intention of Mr. Hillman and associates to organize a company for the purpose of rebuilding and operating them.

### Australian Iron-Making.

United States Consul-General J. P. Bray at Melbourne, Australia, reports that a London company with a capital of more than \$3,500,000 has been formed to acquire extensive iron works at Lithgow, New South Wales, and has given orders for two blast furnaces, steel furnaces and rail and plate mills. This is a part of the movement which is expected to develop the immense iron deposits in New South Wales, Victoria and Tasmania, and to establish the iron and steel industry on a large scale. In one year recently 247,475 tons of steel rails, rolled iron and steel, steel sheets and wire were imported into Australia, and it is estimated that to meet such requirements 307,000 tons of pig-iron would be required, and to smelt the 614,000 tons of first-class iron ore necessary to obtain that much pig-iron about 900,000 tons of coal would have to be used.

## COTTONSEED OIL.

This department is open to the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

### Oil-Mill Superintendents.

The program of the meeting at Galveston this week of the Oil-Mill Superintendents' Association included paper on "Fuel Oil, Coal, Saving, Increase of Horse-Power, Output of Boiler, Safety, and How Used," by John Folliard, Paris, Texas; on "Meal Cooking, One Press for Each Cooker or Two or More Presses for Each Cooker, Difference in the Cost of Press Cloth, Output and Quality of Oil, if Any," by Richard Moore, Pilot Point, Texas; on "Why Will Press Boxes Get Out of Shape, the Cause of It and How It Can be Avoided," by H. J. J. Thiessen, Sherman, Texas; on "Relation of Employee to Employer," by George T. Parkhouse, Cisco, Texas; on "Meal Mill, Its Object and Uses, Burrs or Attrition," by F. W. Rothe, Sherman, Texas; on "The Huller, Its Use and Abuse," by Charles Duncan; on "Internal-Fired Boiler vs. Other Types," by Freeman & Sons Manufacturing Co., Racine, Wis.; on "Boilers and Their Care," by S. J. Duke, Pittsburg, Texas; on "Oil as Fuel," by F. I. Spaulding, Houston, Texas; on "Frictionless Bearings," by Hyatt Roller Bearing Co.; on "Lining and Separation," by R. B. Latting, Purcell, I. T.; on "Bran," by Edwin Lehman Johnson, Memphis, Tenn.; on "What Has Our Association Accomplished During the Eight Years in Existence?" by George C. Walsh, Marion, S. C.; on "Water-Tube Boiler," by Allen L. Canfield; "The Economical Use of Oil Fuel," by M. Griffin O'Neil, and "Cast-Iron Cylinders vs. Steel Cylinders," by J. C. Weaver, all of Dallas, Texas.

### Cottonseed-Oil Notes.

It is stated that Mr. E. H. Young is organizing a company for cleaning cottonseed for export, and is looking for a location in Galveston, Texas. He proposes to install a delinting plant to cost \$20,000 or \$25,000, of fifty tons capacity.

The Farmers' Oil Mill Co. of Nashville, Tenn., has been incorporated, with a capital stock of \$100,000. The principal incorporators are R. U. Brooks, S. G. Griffin, R. A. Cooley, S. A. Batchelor, J. T. Strickland, George N. Bissette, L. W. Boddie, V. D. Batchelor, M. S. Joyner of Nashville, and S. J. Bartholomew of Castalla.

The cottonseed-oil-mill plant now being installed at Pensacola, Fla., will be among the largest of those owned by the Southern Cotton Oil Co., having a capacity of sixty tons a day. The plant will be for the manufacture of crude oil from the cottonseed, and it is the intention of the company after the cotton season is over to build a large refinery. The plans of the company are said to be for a concentration of its export business at Pensacola.

The Planters' Oil Mill at Tallulah, La., completed its organization on the 24th ult. by electing J. M. Johnson, president; A. E. Adams, Jr., treasurer, and the following board of directors: J. M. Johnson, H. Callman, A. E. Adams, W. M. Scott, W. F. Ward, H. L. Dinkins, G. W. Montgomery, Dr. G. W. Gains. The work on the mill will begin shortly, as all contracts for construction of building and placing machinery will be closed within the next few days. The capital stock of the company is \$50,000, and the mill will have a capacity of sixty tons a day.

The following are the official quotations on cottonseed and cottonseed products as



posted at the Cotton Exchange in New Orleans on the 1st inst.: Prime refined oil in barrels, 43 cents per gallon; off refined oil in barrels, 42 cents per gallon; prime crude, loose, 36 cents per gallon; prime cottonseed cake, \$27.50 per ton of 2240 pounds; off do., nominal; prime cottonseed meal, \$27 per ton of 2240 pounds; off do., nominal; soap stock, none; linters, per pound—A, 3½ cents; B, 3¼ cents; C, 3¼ cents; cottonseed in sacks delivered in New Orleans, \$16 per ton of 2000 pounds; in bulk delivered in New Orleans, \$15 per ton of 2000 pounds.

The Independent Refining Co. was organized at Charleston, S. C., last week with a capital stock of \$50,000. The officers of the company are: Morris Israel, president; Robert Keith Dargan, vice-president and general manager, and I. S. Cohen, secretary and treasurer. The new company has acquired control of the property of the Atlantic Refinery, which plant will be greatly enlarged and improved. The Independent Company will handle, it is said, the crude cottonseed oil from more than seventy-five factories throughout the two Carolinas and Georgia. The company will also deal extensively in cottonseed meal and hulls. Mr. R. K. Dargan is general manager of the company.

#### Oyster Packing.

In 1900 there were, according to a census bulletin, thirty-nine establishments in the United States engaged in oyster canning, with a capital of \$1,240,606, with 2779 wage-earners, and products valued at \$3,670,134. Maryland leads, the number of establishments in the State being sixteen, with a capital of \$799,005, wage-earners 1444, and value of products \$2,417,331.

The July Country Life in America is a vacation number with suggestions for many things to do and to see in midsummer. Articles on dogs and horses, summer homes, garden making, camping and varied topics of the outdoor world in July form a superbly illustrated number, as usual, of this large magazine. "Wyndhurst," a picturesque summer home in the Berkshire Hills, is the country estate feature of this month, and "Japanese Gardens in America" shows how the quaint and weird fantasies and the vegetation of the Japanese can be naturally adapted to small areas of landscape gardening, while the Home-Making article this month deals with architectural details as illustrated by "Doorways of Old Salem," showing the possibilities at small cost. Among the leading articles, "A Plea for the Pony" considers the desirability of the various sorts; "The Beagle" is a comprehensive article on this little hunting dog, including a series of remarkable photographs of the pack in action, and Neltje Blanchan, in "The Life of the Ruby-Throated," tells how our little humming-bird flies from near the equator to as far north as the Arctic circle every summer in search of flowers. "Vacation Days" is a calendar of the occupations, sports and nature study of the month.

The textile building of the Louisiana Purchase Exposition will be 525x758 feet, and of Corinthian design. Its site is upon the main avenue at the exposition, and its cost will be \$375,000.

The proceedings of the seventh annual convention of the National Association of Manufacturers, held at Indianapolis last April, have been published in pamphlet form.

Buildings in Baltimore now being erected or contemplated represent an investment of at least \$6,000,000.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### BERKLEY LUMBER INTERESTS.

Advantages of the Place Being Recognized in Many Ways.

[Special Cor. Manufacturers' Record.]

Berkley, Va., June 28.

The Surry Lumber Co. has secured property from the Tunis Lumber Co. at Berkley, Va., which it will improve by installing shook machinery in addition to the planing mill now in operation. The extent of the affair may be measured by the fact of its requiring 500 horse-power. The company will begin operations July 7, but some months will be consumed in placing new machinery. Gov. John Walter Smith of Maryland, Gen. Francis E. Waters of Baltimore and Hon. John P. Moore of Snow Hill, Md., are the prime movers in this new enterprise. They are men of eminent ability, and the success of the enterprise is assured. It is an interesting fact to note that the vast majority of lumbermen in this community were originally Marylanders (mostly Eastern Shoremen), and this trio added to the number would seem to verify the judgment of those who have gone before and to confirm the belief that they really appreciate the many advantages to be gained at this point even more fully than those native-born.

The Atlantic Shook & Lumber Co., recently organized, is about to begin erection of the buildings. It has already placed all the orders for machinery, except an engine, for which it is still in the market. The company wants one of 250 to 300 horse-power, Corliss preferred. Mr. C. W. Rockefeller, a close relative to John D. Rockefeller, is president of this company.

Another company is also about to be organized (the preliminaries having all been arranged) to erect a central power plant, which is to consume the waste material from the several saw-mills, planing mills, box and shook factories, all located near the mills of the Tunis Lumber Co. It is estimated that 3000 to 4000 horse-power would otherwise go to naught, and the power plant is estimated to save this and sell the product in the form of steam and electricity to railroads and manufacturing plants. Mr. Theophilus Tunis is president of the Tunis Lumber Co., Merchants' National Bank Building, Baltimore, Md.

The advantages to be derived by locating here are numerous, not the least of which is its deep-water facilities, which enable shippers located directly on the harbor to secure such all-rail rates (by reason of water competition) as will easily give us a decided advantage over cities north of us, and while we are possibly a little further away from the source of supply than Wilmington or cities further South, yet the excellence of our harbor and the natural location, both for export and coastwise shipments, is not equaled by any other point in the United States. Western shippers are as near to us as any other point of importance engaged in the export trade. It must not be forgotten that Berkley is a large factor in the upbuilding of the port, and has not had her full share of the glory. Of the lumber manufactories located in and around this community Berkley can boast of supplying at least four-fifths of the output. The same can be said of other manufactories in our town. Berkley has really been relegated to the rear, and her glory been absorbed by Norfolk, which city has accordingly been placed to the front. There is still

considerable valuable water-front, which can be bought at reasonable figures and the advantages of which are indisputable. The central power plant, referred to above, will be in a position to furnish power by electricity to those who might locate on these sites, and the economy of such power has been demonstrated in various parts of the country. This overcomes a source of anxiety being felt by many on account of the coal miners' strike now in force, but there are arguments without number which can be brought to bear with anyone who might be interested even far enough to inquire into the matter to convince them of the practicability of such a purchase as a paying investment. I am so thoroughly convinced, however, of the wonderful future in store for this locality (Berkley in particular) that a man of only ordinary perception and foresight will need only to look the ground over to fully realize its real worth.

### LUMBER MARKET REVIEWS.

#### Baltimore.

Office Manufacturers' Record,

Baltimore, Md., July 2.

The local lumber market has developed a full average volume of business during the past week, and indications point to a steady demand during the summer and fall months. Of the various woods traded in, North Carolina pine shows, perhaps, the best form, being in good demand in both a domestic and foreign way. Stocks at all milling points are showing very little accumulation, and the output at the moment is about ample for the demand. Prices throughout the general list are firm, and dealers and manufacturers are generally firm in their views as to values. Cypress lumber is selling freely, and values have improved very much during the past month. Poplar still retains its popularity, and is in good demand at the moment, with stocks at mills light and dry material scarce. The market for hardwoods is generally very steady, with a good general demand for all desirable lumber. Prices for oak, ash and other woods are showing material improvement, both for home and foreign shipments.

#### New Orleans.

[From our own Correspondent.]

New Orleans, La., June 30.

In reviewing the lumber trade of this section for the month of June, now about to close, it is safe to state that the volume of trade has not been a disappointment to manufacturers and dealers. In Mississippi, Louisiana and Texas the lumber business was never better than at present, and the demand, both domestic and foreign, has shown during the month steady improvement, while experts are of the opinion that the summer and fall months will be characterized by unusual activity in nearly all avenues of the lumber industry. Of the various woods on this market, cypress is showing up in splendid form, and with good crop prospects the mills will have all the business they can handle during the present year. The demand may be termed urgent and general in character. Orders to Louisiana cypress mills are coming in freely from Illinois, Indiana, Wisconsin, and from the Territories, while the demand from New York and other Northern ports is good. With regard to prices, the tone is decidedly firm for all grades, being, in fact, a sellers' market. The Ruddock Cypress Co. of Ruddock, La., whose extensive plant was recently destroyed by fire, is to be rebuilt without unnecessary delay upon a larger scale, the plans contemplating a double instead of a single band mill. The crew formerly employed at Ruddock has been turned into a night shift on the New Orleans Cypress Co.'s

plant in this city, which will in this way be kept in constant operation. The yellow-pine movement in Louisiana, Mississippi and Texas is in fine form, and the demand from domestic points was never better than at present. Many mills are running day and night, and others are preparing to double their capacity. The hardwood trade is materially improved, and owners of hardwood timber lands in Mississippi and other States in the South are realizing the proper value of their holdings, and many have decided not to sell until such time as they can get their price. During the past year hardwood timber in Mississippi has been sold at from \$5 to \$15 per acre, when the actual value was ten times that sum. The receipts of hardwoods at this port are more liberal, and the volume of business expanding, both in the home and foreign export trade. The foreign house of Arthur Forchheimer of Frankfurt, Germany, is about to establish a branch in this city for the exporting of pine and hardwoods, and an agent has already made arrangements and established an office. The demand for lumber for local building purposes is increasing, as there is considerable doing in the building line. Architects are very busy at present, and contractors generally are fully employed on city and suburban improvements. In the real estate market business has not been as good for some years as at the present time. Bonuses are being offered for leases, and desirable property is hard to obtain, both in business and resident sections. There are fewer offerings at auction, and while the demand is good, persons who were anxious to sell last year are now firm holders at advanced figures. Real estate men all look for a good summer season's business. The New Orleans & Louisiana Abstract Co., with a capital of \$75,000, has been incorporated, and the work of establishing the undertaking will be begun immediately. As soon as the indites of the company have been completed from the official records an additional company will be formed in about a year. When that step is taken there will be a considerable increase in the general business of the city on account of the facility with which transfers of real estate either by trust or warranty deeds can be made.

#### Mobile.

[From our own Correspondent.]

Mobile, Ala., July 1.

The lumber and timber market in this section continues to show indications of a good substantial business during the summer and fall months. The timber market is firmer, with sales of over 1000 pieces of 33 cubic feet average at 16½ cents per cubic foot. Receipts of sawn timber are moderate, and values range from 15½ to 16½ cents per cubic foot. Hewn timber is steady, with a light supply, at 15½ to 16 cents per cubic foot; hewn oak is quoted at 18 to 20 cents, and hewn poplar at 14 to 15 cents. The lumber trade is good, both at this and all adjacent ports, and shipments last week aggregated 1,884,531 feet, and for the season 82,623,530 feet, against 94,864,057 feet for the previous season. All the mills at this and adjacent points are working at their full capacity. The demand for lumber is coming mostly from Mexico, South America and the United Kingdom and Continent. There is a moderate tonnage offering, but rates are easier. Charters reported are bark Bruce Hawkins, 546 tons, from Pensacola to Boston with lumber at \$7.50, and British steamer Kingsland, 1296 tons, from Pensacola to Norway with timber on private terms, prompt, and Norwegian bark Sterling, 1167 tons, from the Gulf to Kiel with timber at 87/6.

**Memphis.**

[From our own Correspondent.]

Memphis, Tenn., June 30.

The lumber market throughout Middle and West Tennessee continues to show strong features, both in the development of rich timber tracts and in the volume of trade in the markets at Memphis and Nashville. In the Memphis district the outlook is favorable for an unusual movement in all commercial woods, and the demand for hardwoods is especially strong. Milling operations in the Mississippi Delta and Arkansas are increasing every year in importance, and receipts of lumber at this point liberal. Hardwood mills in the Delta are furnishing some of the finest grades of lumber, and the rich virgin territory of that section is being rapidly developed by local and outside capital. Memphis lumbermen, as a rule, view the outlook as encouraging, and anticipate a good trade during the next half-year. There is a scarcity of dry lumber at the moment, and desirable lots are in good demand. Quarter-sawn white and red oak is most prominent in the market, being in good demand. One-inch firsts and seconds are selling at from \$50 to \$55 per 1000 feet, according to condition. There is a good demand for ash from Eastern buyers, mostly for firsts and seconds and stock thicker than one inch. Receipts of cottonwood are liberal, with a good demand from boxmakers and other wood-working concerns, which are all well supplied with orders. There is a good demand for red gum for export. Firsts and seconds and all red common stock sell readily. The scarcity of walnut in this and other markets of the country is becoming an established fact, and from various points in the timber region of Middle Tennessee old walnut stumps that were formerly considered useless are now being utilized and sold for outside prices. These stumps are made into veneering material and used in the manufacture of high-grade material.

**Lumber Notes.**

The Hill Lumber & Manufacturing Co. of Natchez, Miss., has been chartered, with a capital stock of \$30,000. The incorporators are E. A. Hill and A. B. Leonard.

The Tyler Box & Lumber Manufacturing Co. of Tyler, Texas, has been chartered, with a capital stock of \$25,000. The incorporators are J. F. Christian, M. M. Davidson and S. W. Tipton.

The Timbers of America, a corporation organized at Ashdown, Little River county, Arkansas, has been incorporated, with a capital stock of \$5000. F. A. Locke is president of the company.

The Lumbermen's Clearing-House Association of Gulfport, Miss., has been chartered, with a capital stock of \$50,000. The incorporators are S. S. Bullis, W. W. Thornton and A. L. Thornton.

The Mincola furniture factory at Mincola, Texas, which was destroyed by fire a short time since, is being rebuilt, and the box factory at that place will be in operation again by the middle of July.

The Clifton Lumber Co. at McNeill, Pearl River county, Mississippi, has been chartered, with a capital stock of \$10,000. The incorporators are Jerry Hinton, J. W. Turner, B. A. Watson and C. W. Robinson.

One of the largest tows of lumber ever brought to St. Louis arrived last week from the upper river. It contained more than 5,000,000 feet, and was consigned to the Knapp-Stout Lumber Co. The tow left Stillwater, Mich., on June 10.

The Bauer Lumber Co. of Eaton, Ind., has lately purchased the Richardson &

Jordan saw-mill, one mile south of McHenry, Miss., and will in a few days begin to build a tramroad in a westerly direction for the purpose of logging to the mill.

The month of June was an exceptionally good one at Pensacola, so far as shipments of lumber from that port were concerned. On the 21st ult. four ships cleared, with a combined cargo of 6,540,000 superficial feet, besides 1113 pieces of piling.

The Chickasaw Lumber Co. of Ardmore, I. T., has been incorporated, with a capital stock of \$30,000. The incorporators are C. L. Byrne, W. C. Baker, T. N. Harris, J. A. Burns, George Corhn, F. C. Frensley, J. B. Spraggins and F. M. Gates.

The \$150,000 oak spoke factory now being erected at Huntsville, Ala., for Minchner & Henderson will be completed and in operation next week. The plant will start up with fifty operatives, and 100 additional men will be put on in a few weeks.

It is stated that a project is on foot to erect another saw-mill at Ellisville, Miss. Negotiations are now in progress, and if the plans of parties interested are successful a \$150,000 plant will be put in. A magnificent belt of timber will be acquired.

The shipments of lumber from the port of Mobile last week aggregated 1,884,531 feet, and for the season 82,623,530 feet, against 94,864,057 feet last year. Shipments of sawn timber for the week were 407,821 cubic feet, and of hewn timber 8748 cubic feet.

A representative of the Watts & Herndon Company of Saginaw, Mich., visited Charleston, S. C., last week in connection with the timber industry in that section. This firm, it is said, contemplates making large investments either in Georgia, South Carolina or Florida.

The Louisiana Central Lumber Co., formerly the Clark's Spur Lumber Co., is preparing to erect another large saw-mill on the line of the Iron Mountain Railroad, about seven miles below Columbia, La. The proposed concern will be a double-band mill, and the company has bought many thousands of acres of timber land in that section.

**Business for Mexico.**

Valentin Eleoroy & Co. of the City of Mexico write to the Manufacturers' Record as follows:

"We are dealers in general machinery and hardware, and import large amounts of goods from your country. We represent various manufacturers, and are doing a good business for them. Our main business is in engines and boilers, pumps of all descriptions, agricultural implements, thrashing and harvesting machinery, also mine supplies and machinery, and we find that the demand for these goods is daily increasing in this country. We find, however, that many manufacturers in the United States do not as yet understand the export business, and do not give houses abroad the necessary information as to prices, weights, etc., of their machinery. The firms that have made a special study of the export business are reaping good benefits therefrom, and you could call the attention of your subscribers to this point if they wish to increase their trade with Mexico."

Charters granted in Baltimore during the past six months were for eighty-two manufacturing and trade companies, with a capital stock of \$2,829,500, and for seventeen building associations, land and loan companies, with a capital stock of \$6,970,500.

**PHOSPHATES.****Phosphate Markets.**

Office Manufacturers' Record,

Baltimore, Md., July 2.

The local phosphate market is rather quiet, as in all other fertilizer ingredients, and manufacturers are only buying to supply immediate wants. The reports from the Southern phosphate belt are generally favorable, and the shipping from the various ports indicate a liberal output at all points. In Tennessee several new companies are in the field, and at Mt. Pleasant and other phosphate centers the movement is active. The great scarcity of labor, however, retards operations, and miners generally are disposed to hold their rock at outside figures. The demand for both domestic and foreign rock is good, and values very steady. In Florida there is a good demand for both land rock and pebble, and from the Florida ports shipments during the past month have been much better than formerly. The weather is very favorable for mining, and in consequence large shipments are going forward to the various ports. The movement in South Carolina is fair, and those engaged in mining are making some heavy foreign shipments of rock. The market for South Carolina rock continues steady.

**Fertilizer Ingredients.**

The market is quiet, with very little demand from the usual sources in the East or South. Packers claim to have small stock, which they hold firm at outside figures. Messrs. Thos. H. White & Co., in their circular for June, report the market as follows: "Ammoniates during the early part of June were active, and a fairly good demand absorbed all offerings at reasonable prices. The latter part of the month, however, has been quiet, with buyers and sellers rather far apart in their views. The fish catch in the Chesapeake bay so far is reported to be very poor."

The following table represents the prices current at this date:

Sulphate of ammonia (gns)...	\$3 05	6 1/2	3 07 1/2
Nitrate of soda, spot Balto....	2 15	6 1/2	2 20
Blood .....	2 32 1/2	6 1/2	2 35
Azotine (beef).....	2 40	6 1/2	2 45
Azotine (pork).....	2 40	6 1/2	2 45
Tankage (concentrated).....	2 15	6 1/2	2 17 1/2
Tankage (9 and 20).....	2 35	6 1/2	2 37 1/2 & 10
Tankage (7 and 30).....	21 00	6 1/2	22 00
Fish (dry).....	27 50	6 1/2	30 00

**Phosphate and Fertilizer Notes.**

The steamship Bellerby arrived at the Central Phosphate Co.'s works at Beaufort, S. C., on the 28th to load phosphate rock. The Bellerby has a capacity of 4300 tons, and will take a full cargo.

The steamer Firth of Forth cleared last week from Savannah, Ga., for Bremen and Hamburg with 2506 tons of high-grade Florida phosphate rock for the latter port. The steamship Danby cleared for Hamburg with 3000 tons of high-grade Florida phosphate rock, valued at \$30,000.

The plant of the Dixie Manufacturing Co. at Richmond, Va., was practically destroyed by fire last week. The loss on plant and stock as estimated will amount to over \$10,000, with full insurance. The proprietors of the Dixie Manufacturing Co., engaged in the manufacture of fertilizers, are John T. Anderson & Son and Mr. Clarence Crosby of Richmond.

The new phosphate company at Nashville, Tenn., which will shortly be chartered, will have a capital stock of \$150,000, and will be known as the Beech River Phosphate Co. The incorporators are T. S. Hughes, L. H. Burke, John A. Pitts, R. M. Dudley and John M. Gray, Jr. The incorporators own about 4000 acres of phosphate land in Decatur county, Tennessee, and will begin to mine

at once. The main office of the company will be at Parsons, about seven miles from Perryville, Tenn. The plant will be in charge of L. H. Burke, a practical engineer. Mr. T. S. Hughes will supervise the affairs of the company.

The annual meeting of the stockholders of the National Fertilizer Co. of Nashville, Tenn., was held in that city on the 24th ult. The annual reports of the officers were submitted, showing that the sale of fertilizer had been curtailed during the year, and attributing it to increased competition and disastrous floods in the Nashville section. The financial showing met expectations. The stockholders present favored the consolidation of the plant with that of some other company if it could be accomplished on equitable terms. If not, it was thought the capital stock should be increased \$75,000, of which \$25,000 could be used in building acid chambers, thus doubling the capacity of the plant, and the remainder as working capital. A committee was appointed to devise ways and means for carrying out the views of stockholders and report at a meeting to be held July 22. The following directors were chosen: Isaac T. Rhea, J. H. McPhall, James Compton, Henry Sperry, Edgar Jones, Thomas M. Hart, E. B. Stahlman and W. P. Smith. Mr. J. T. Rhea was elected president.

**Automobiles Abroad.**

John Renette of 84 Boulevard Militaire, Brussels, writes to the Manufacturers' Record that he proposes to organize in Belgium a company to control the sale of vehicles of American manufacture exclusively. He adds:

"You are certainly not aware that American automobiles are almost completely unknown in Europe. The Continent makes use only of French machines or of German and English ones, but in very limited numbers. I doubt not that those made in the United States will in the very near future find a great sale, and I have written to that effect to all the important manufacturers, asking their assistance in furtherance of my project. If I succeed in obtaining the co-operation of the principal houses of your country, and this I do not doubt, I shall not cease to look for the realization of my ideas, at the same time endeavoring to establish a general agency for all those firms who may feel willing to entrust me with the sale of their vehicles. I am assured of the assistance of a skilled electrical engineer, and the intelligent support of this gentleman, joined to numerous personal connections of my own in Belgium and foreign countries as well, gives me the assurance of an extensive business influence. If it is true that Mr. Edison has found the means of charging electrical accumulators so as to make them capable of extended journeys without necessity of renewal, the moment is indeed apropos for the creation of the combination I propose, and no other concern on the Continent could combat it successfully."

**For American Tools.**

Casamitjana Bros. of Barcelona, Spain, who have made satisfactory purchases of American goods, write to the Manufacturers' Record that they desire to establish relations with American manufacturers of lathes, boring machines, screw tapping and cutting machines, machines for sharpening and setting center-bits, files, bits, taps, augers, borers, mandrels and all sorts of other tools for mechanical construction. The firm writes that up to the present it has been buying such articles of English, French and German houses, but it is sure that American manufacturers can give it good terms.

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## MECHANICAL.

## Special Steam Traps and Separators.

Occupying a deservedly prominent position amongst the largest dealers in machinery of all kinds throughout the South is the firm of W. H. Gibbs & Co. of Columbia, S. C. One of the agencies held by this firm is that of the Bundy steam specialties, consisting of steam traps, steam oil separators, boiler-feed water heaters, etc., manufactured by the A. A. Griffing Iron Co. of Jersey City, N. J. Descriptions of a few of the most interesting of these specialties follow.

The trap shown in Fig. 1 is designed and used for boiler-feed purposes, consti-

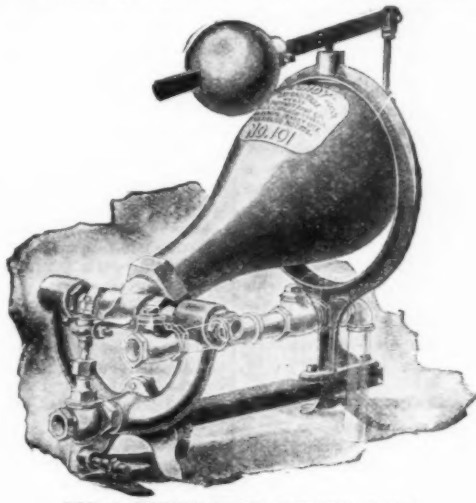


FIG. 1—BOILER-FEED RETURN TRAP.

tuting an automatic feed. It is located at some convenient place in the boiler-room, usually from three to six feet above the water line. Water fed to the trap is discharged at regular intervals of filling into the boiler, and since the volume of water handled by the trap at each operation is the same, a "counter" may be attached to the machine to keep a record of the number of operations. By means of this an exact tally of the amount of water fed into the boiler in any stated period of time may be accurately determined. All working parts of the trap are on the outside and visible. The construction is simple. The operating valve is reliable and positive. The receiving bowl is induced to alternately rise and fall, while filling

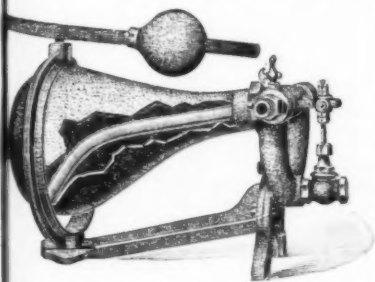


FIG. 2—"BUNDY" SEPARATING STEAM TRAP.

and discharging, by the weight of the water which it contains and the iron ball weight suspended on the horizontal lever. This movement opens and closes the steam and vent valve, which controls the admission of boiler pressure steam to the trap.

The function of the "Bundy" separating steam trap, shown in Fig. 2, is to separate condensation from steam and throw it away without permitting any escape of the latter. It will not remove suspended moisture from steam, unless it reaches such a degree of specific gravity as to enable it to flow into the trap. The arrangement of the curved pipe inside the receiver forms a water seal, which effectively prevents the steam from blowing through the trap. This is used to relieve steam mains, cylinder jack-

ets, reheaters, coils and other apparatus.

The "Bundy" steam and oil separator, shown in Fig. 3, is used on live steam lines, principally those supplying engines, for removing water held in suspension from steam, and for purifying exhaust and separating from it cylinder oil and other impurities. A nest of baffles in this machine are placed in position so as to intercept the column of steam at right angles, and subject it to a thorough process of filtration. The removed water or oil follows an interior channel cut through the columns of the baffles, and is deposited in the receiver, from whence it may be drained by means of a steam trap. The baffles are loose, to permit of taking them out to be cleaned from time to time.

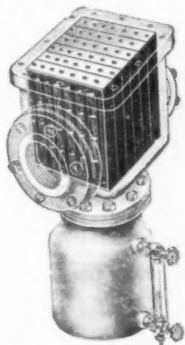


FIG. 3—"BUNDY" STEAM AND OIL SEPARATOR.

hour. The system will be used to feed back to the boilers the immense quantity of condensed steam collected from the numerous heating coils throughout the plant.

## "National" Oil Burner.

Properly applied and for certain purposes, oil has a number of distinct advantages as a fuel. Improperly applied, it is a dangerous substitute for good steam coal.

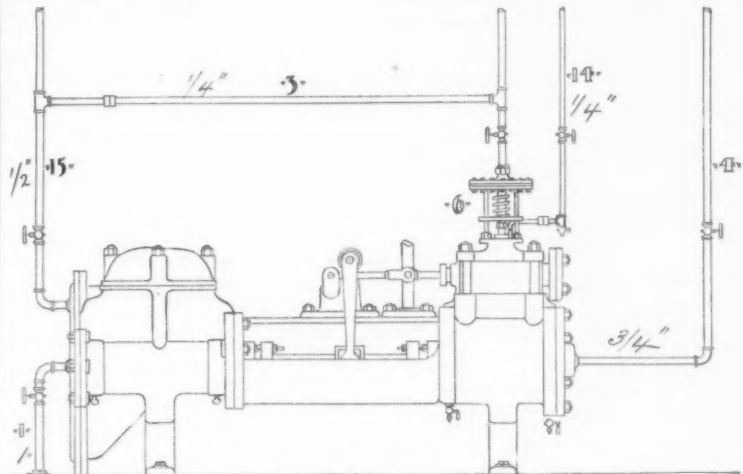
With the opening of the Beaumont oil fields and consequent immense increase in the country's oil supply, it is probable that oil as a fuel will be more generally used.

The principal difficulty, aside from lack of transportation facilities, which has prevented its more universal adoption is ignorance of its advantages.

Properly supplied, little danger attends its use. The tank should be buried some distance from the furnace, and the oil fed in through suitable burners.

The National Oil Burner & Equipment Co., Carleton Building, St. Louis, is manufacturing a burner which appears to

have a successful and entirely automatic feed. The burner superheats and burns together oil, steam and heated air direct from the furnace. Oil contains a certain number of heat units, and when properly combined with steam and air, both of which contain very combustible elements, the heat is intensified and the consumption of oil reduced.



"NATIONAL" OIL BURNER.

Exhaustive tests witnessed by prominent engineers substantiate these claims. This company also makes domestic heaters and equips smelting plants, as well as any ordinary furnace. It calls especial attention to the manner in which the oil is both heated and cleaned in its burner; that is, by introducing hot water directly under the oil, using a small pump and regulator valve for the purpose.

## Practical Electrical Economy.

There has been such general introduction of electricity throughout the entire country that scarcely any section is without its electric plant for lighting or power. Electrical equipments at times meet with accidents or breakage, which incapacitate them for immediate operation. If it happens that the cessation of operations is likely to be for days, the manager or superintendent is at his wit's ends to make the necessary repairs or replacements of machinery with promptness. When competent repair houses and electrical supply stocks are at hand this is not difficult, or when the manufacturers of the damaged machinery can furnish duplications or repairs immediately on receipt of order. But the industrial world is so busily engaged in these active days that frequently manufacturing plants have their output contracted for months, and are thus unable to make prompt shipments.

When such conditions arise practical electrical economy is at a standstill, and it is then that local repairers and supply houses are called upon, often to do work in which their operators are not sufficiently experienced. These conditions have brought into existence departments that make a specialty of quick repairs and duplications of parts, manufactured on the site of the trouble.

Take armature rewinding, for instance. Not every electrical supply house is prepared to rewind armatures; in fact, but few are prepared to do it with entire satisfaction. Facilities for high-grade work of this character open a field in which to secure important contracts and smaller contracts that will lead to future business.

A firm that can offer exceptional service when the operator of an electric plant is in a dilemma to secure repairs, rewinding and apparatus in a hurry is the Doubleday-Hill Electric Co. of Pittsburg, Pa. This is one of the most prominent companies in the electrical field, and besides its general business, has an especially well-organized and competent force of work-

men and facilities for rewinding and repairing. Its workmen are thoroughly skilled, and with long experience are enabled to understand electrical plants of every character thoroughly.

A booklet entitled "Practical Electrical Economy" is issued by this company in the interest of its repair and rewinding department. Its contents should be per-

rused by every superintendent and manager who is desirous of keeping pace with modern advancement in the field to which its title refers.

## The Atkins Channeling Set-Block.

The Atkins channeling set-block, an illustration of which is reproduced here, is made from extra quality drop-forged and hardened tool steel, and is said to be practically unbreakable and never to wear out.

The set-block is used for setting and channeling the cutting teeth of cross-cut saws, thereby producing a more desirable set and relieving friction at the sides of the teeth.

The set-block can be used on a filing



ATKINS CHANNELING SET-BLOCK.

bench, or on any surface on which the saw may be set. The teeth are set by a light blow on the apex or high point of the bevel, the tooth is then drawn forward, so that the body is on the convex point of the set. The tooth is then struck a light blow over the point of the anvil, which causes it to spring down, producing a slight channel running lengthwise of the tool.

This improved device is manufactured exclusively by E. C. Atkins & Co., Inc., Indianapolis.

Filtering Systems.—The firm of William B. Scaife & Sons, 221 First avenue, Pittsburg, has recently received very heavy orders for hot continuous filtering systems. Orders for systems of various sizes, running from 500 to 1,250,000 gallons per day, have been shipped to all parts of the country.

# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

## ALABAMA.

Alabama Port-Shipbuilding Plant.—Gulf Coast Ship & Marine Ways Co. has in view the construction of \$200,000 plant for shipbuilding and repairing. For information address the company or Jos. Espalla, Jr., & Co., 80 St. Francis street, Mobile, Ala.

Anniston—Lime Works.—Anniston Lime & Stone Co. has purchased site for and will erect four large lime furnaces, a power-house, electric plant, etc. Plans and specifications will be prepared at once.

Eutaw—Cotton Gln.—Buckeye Cotton Oil Co. has purchased half-interest in cotton gln of E. H. Anderson & Co. Plant is being rebuilt and enlarged to a daily capacity of fifty bales. W. W. McAlpine of Boligee, Ala., is the contractor.

Florence—Oil Wells.—Woodland Oil Co. has been organized to drill for oil on J. M. Allen's farm.

Decatur—Railroad Shops.—It is stated Louisville & Nashville Railroad Co. (M. H. Smith, president, Louisville, Ky.) will double size and capacity of its Decatur shops. Specifications have been drawn and contracts for construction awarded, work to begin within sixty days.

Huntsville—Gas Plant.—Robert C. Brickell and associates have bought Huntsville Gaslight Co. and plant at \$43,000, and will expend about \$25,000 to improve said plant.

Mobile—Ice Plant.—Crystal Ice Co. (plant established) has been incorporated, with capital stock of \$10,000, by John Hollinworth, Jas. R. Quinlivan and Clara B. Quinlivan.

Montgomery—Trousers Factory.—Steiner & Lobman will erect additional trousers factory; building to be of brick, 50x100 feet, to cost \$15,000; contract awarded to Riverside Brick Co. for construction.

Pratt City—Water-works.—Robert R. Zell and associates, offices at 202 McGowan Building, Birmingham, noted last week as purchasing the Pratt City water-works, will extend and improve the system. Mr. Zell will be mechanical engineer in charge.

Russellville—Brick Plant.—Orman & Forliss have established brick plant with capacity of 15,000 daily.

Troy—Oil Mill and Fertilizer Factory.—Standard Oil & Chemical Co. has been organized with Fox Henderson, president, and

the capital stock is \$200,000. It will build cottonseed-oil mill and fertilizer factory, and later add an oil refinery and ice plant.

Wetumpka—Water-works.—City contemplates constructing water-works, and is obtaining estimates. Address "The Mayor."

Wrightsville (P. O. at Opelika)—Electric Light Plant.—Boston capitalists represented by H. D. Capers of Auburn, Ala., propose developing water-power and erecting electric-light plant.

## ARKANSAS.

Arkadelphia—Electric Light and Water Works and Ice Factory.—J. M. Wilson and associates have applied for franchises to construct water-works, electric-light plant and ice factory.

Ashdown—Lumber Company.—Incorporated: Tlemakers of America, capital stock \$5000, and F. A. Locke, president.

Big Bay—Mercantile.—A. J. Shipley Company has been incorporated, with capital of \$2000; R. A. Simpson, president, and A. J. Shipley, secretary.

Kendron—Lumber Company.—Chartered: Frank Kendall Lumber Co., with Frank Kendall, president; N. T. White, vice-president, and Oscar E. McKenzie, secretary. The capital stock is \$300,000.

Little Rock—Lumber Plant.—Johnson Lumber Co., reported last week, has let contract for erection of buildings and for machinery to manufacture hardwood lumber and wagon stock; capital is \$10,000.

Marvell—Cotton Gln.—Marvell Gln Co. has been incorporated, with capital of \$10,000. L. J. McKinney is president; H. C. Daniels, vice-president, and J. B. Swift, secretary-treasurer.

Rector—Cotton Gln.—Farmers' Gln Co., capital stock \$43,000, has been chartered with Joseph Wolf, president; E. W. King, vice-president; M. F. Collier, secretary, and Luther King, treasurer.

## FLORIDA.

Lakeland—Electric Light Plant.—Bruce Neff has purchased Lakeland Electric Light Works and will expend \$5000 to \$6000 for improvements.

Ocala—Electric Light Plant.—City will expend about \$20,000 to enlarge, improve and add machinery to its electric-light plant. M. Fishel is mayor.

Pensacola—Oil Mill.—Southern Cotton Oil Co. (offices at Montgomery, Ala.) has let contract for the cottonseed-oil mill recently reported. Plant will include building 40x240 feet, for which Cook & Laurie of Montgomery, Ala., are contractors. Machinery will have capacity for sixty tons daily. At the end of the coming cotton season the company expects to add refinery to manufacture lard, soaps and other articles of export.

Pensacola—Lumber Plant.—Southern States Lumber Co. has begun rebuilding its dry-kilns and planing mills recently burned; will expend about \$35,000. All machinery has been purchased, and rebuilding is by day labor.

St. Augustine—Water Reservoir.—City will construct an additional reservoir and increase its water supply. Address "The Mayor."

Tallahassee—Electric Light Plant.—About \$16,000 will be available for constructing the municipal electric-light plant mentioned last week. Bids will be advertised for at once. Address Louis C. Yaeger, chairman of light committee.\*

Tampa—Coca Cola Factory.—Tampa Coca Cola Bottling Co. has been organized, with Sidney B. Sharp, manager, to establish coca cola factory and bottling plant.

## GEORGIA.

Abbeville—Furniture Factory.—The Hardwood Manufacturing Co. proposes erecting additional building and installing machinery for the manufacture of furniture, hubs, spokes and handles.

Atlanta—Social Colony.—Alkahest Home & Printing Co. will be organized, with capital of \$20,000, to establish a social colony to conduct printing plant, etc. Andrew M. McConnell can be addressed.

Atlanta—Railway-appliance Works.—Barry Railway Gate & Appliance Co. has been organized to manufacture automatic railway crossing gates under the system of patents of M. C. Barry. Frank N. Baisden, Isaac S. Boyd and Ed. L. Humphreys are interested. Address latter, care Box 385.

Augusta—Levee Construction.—Nesbitt

Wingfield, commissioner of public works, is preparing plans and specifications for city's proposed dam and levees for protection from floods. About \$50,000 is contemplated cost.

Auraria—Gold Mine.—Etowah Gold Mining & Milling Co. is developing its gold mines, T. M. Keyser being local manager. New York offices are at 45 Broadway.

Canton—Gold Mine.—Cherokee Sixes Mining Co. has been incorporated, with capital stock of \$1,000,000, and Geo. F. Case, president; Frank L. Kuhn, secretary. This company has been developing for about a year 163 acres of gold-bearing lands.

Griffin—Oil Mill.—Griffin Cotton Oil Co. will organize to build cottonseed-oil mill; building 600 feet long will be erected. Other details not stated yet.

Poulan—Cotton Mill.—Poulan Cotton Mills, reported last week, will have \$100,000 capital stock and install 5000 spindles with 160 looms. Company will utilize uncompleted mill building; will complete same, erect picker-room and other structures; also will install electric-light plant and fire equipment. W. C. Vereen of Moultrie, Ga., is president, and Columbus Alford of Willingham, Ga., vice-president. Address the company.

Rome—Cotton Mill.—Anchor Duck Mills (now operating looms only) expects to install carding and spinning plant of 3500 spindles; will erect two-story building 100 feet long; probably about \$50,000 will be expended.

## KENTUCKY.

Ashland—Grocery.—Jas. Hatcher of Pikesville, Ky.; R. A. Field, Fred. Becker, J. B. Leech and Frank Ross of Catlettsburg, Ky., have incorporated Field Grocery Co., with capital of \$50,000.

Covington—Gas and Oil Wells.—Chartered: Campbell County Mineral Oil & Gas Co., \$10,000 capital, by W. H. Glore, G. F. Grothaus and R. N. Walthall of Covington, and G. F. Schickner of Latonia, Ky.

Frankfort—Distillery.—Kentucky Distilleries & Warehouse Co. is reconstructing building recently destroyed by fire; capacity will be 600 bushels daily.

Lexington—Asphalt Mines.—R. M. Hardman proposes organizing a \$500,000 company to develop the rock asphalt fields of Eastern Kentucky, also to build refinery; 5500 acres of land have been leased.

Louisville—Millinery.—Incorporated: Byers Millinery Co., capital stock \$50,000, by M. H. Crawford, Thomas J. Morrison and John W. Yenowine.

Louisville—Paint and Varnish Works.—Val Blatz Paint & Varnish Co., reported with \$10,000 capital last week, will build works. Address, care Herman Blatz.\*

Louisville—Coal Company.—Chartered: Shamrock Coal Co., with \$10,000 capital stock, by V. R. Givens, C. S. Price, W. E. Wooten and J. K. Orr.

Louisville—Manufacturing.—Hegan Manufacturing Co., with \$32,000 capital stock, has been chartered by S. P. A. C. and James E. Hegan.

Louisville—Gas and Oil Wells.—Chartered: Eastern Kentucky Oil & Gas Co., with \$25,000 capital, by George W. Fyfe, John W. Bloom and W. F. Carter.

Louisville—Liquor Dealers.—Incorporated: C. P. Moorman & Co., capital stock \$100,000, by C. P. Moorman, C. H. Gibson and W. C. Wheeler.

Louisville—Lumber Company.—Incorporated: Ludlow Lumber Co., with \$5000 capital, by Thomas Johnson, John Nagg and R. L. Wilson.

Paducah—Wagon Factory.—Keller Manufacturing Co., wagon manufacturer, of Corydon, Ind., is seeking a location in Paducah to produce from ten to twenty farm wagons daily.

Somerset—Electric Plant.—H. C. Hubbell & Co. contemplate building an electric plant at a cost of \$12,000. Their engineer in charge is John A. Stewart of Cincinnati, Ohio.

## LOUISIANA.

Clinton—Ice Plant.—E. A. McCoy will erect an ice plant.

Columbia—Saw-mill.—Louisiana Central Lumber Co. will build another large double-band saw-mill on Iron Mountain Railroad.

Gueydan—Electric Light and Ice Plant.—It is proposed to organize \$10,000 company for the construction of ice plant and water-works. Fisher & Isaacs can probably give information.

Gueydan—Power and Water Plant.—Gueydan Water-Works & Power Co., Ltd., has effected organization, with capital stock of \$10,000; W. L. Doss, president; H. L. Gueydan, vice-president, and J. G. Neelis, secretary.

Jennings—Paper Mill.—J. F. Wellington and associates contemplate building a mill to manufacture wrapping paper from rice straw refuse of an established paper mill.

Jennings—Oil Wells.—Northern Oil Co. has been organized, with capitalization of \$500,000, and contracted for wells to be drilled on its land. E. F. Rowson is president, and H. K. Midkiff is general manager.

Monroe—Molasses Cannery.—Monroe Molasses & Sugar Co., Ltd., has been organized, with capital of \$100,000, for canning pure molasses, etc. R. A. Shotwell, secretary, can be addressed.

New Orleans—Tannery.—A \$250,000 company will be organized for the establishment of an extensive tannery. W. D. Stevens of Atlanta, Ga., will furnish \$50,000 of the capital, and local investors the remainder.

New Orleans—Amusement Enterprise.—Floating Palace Amusement Co. has been incorporated, with capital of \$50,000; Frank Rodney, president; F. W. Zirzer, secretary, and S. J. Alfred, manager.

New Orleans—Sugar Refinery.—Dispatches state that New Orleans and New York capitalists are planning the organization of a company with capital of \$5,000,000 to build sugar refinery. Names of interested parties not announced yet.

Shreveport—Lumber Plant.—Allen & Curry Manufacturing Co. proposes rebuilding its burned plant, to have two-story building 70x140 feet, exclusive of brick boiler-room, shavings vault and office. Buildings will cost \$7500 and machinery cost \$20,000.

Shreveport—Wagon Factory.—Snyder Wagon Co. will rebuild at once its burned factory.\*

Tallulah—Cotton-oil Mill.—J. M. Johnson and others, lately reported to build oil mill, have organized Planters' Oil Mill Co., with capital of \$50,000, and will build 60-ton plant. All contracts practically closed. J. M. Johnson is president, and A. E. Adams, Jr., treasurer.

## MARYLAND.

Annapolis—Oil Well.—Eastern Mining & Investment Co. has let contract to drill for oil.

Baltimore—Real Estate.—Incorporated: Dummon Real Estate & Improvement Co., by John H. Dumler, John A. Boyd, Sydney McCall, James C. Morton and Francis I. Mooney, with a capital of \$1000.

Baltimore—Refinery.—Calvert Refining Co., for manufacturing metals and chemicals, has been incorporated by William A. Rives, Isidor Rothschild, Frederick A. Memmert, Abraham Goldstein and Albert L. Frank. The capital is \$2000.

Baltimore—Elevator Works.—Incorporated: Baltimore Machine and Elevator Works, for constructing electric elevators and other machinery, by Edward A. Robinson, Harry P. Suman, Francis A. Lazenby, Edgar M. Myers and Joseph R. Thompson. The capital is \$25,000.

Baltimore—Construction Company.—Ocidental Construction Co. has been incorporated, with capital of \$120,000, by E. C. Thomas, chairman of Erie Railroad; S. R. Galloway, president American Locomotive Co.; Samuel Spencer, president of Southern Railway, each of New York city, and L. F. Loree, president of Baltimore & Ohio Railroad, Baltimore, Md. (It is probable the company is for special and not general construction purposes.)

Baltimore—Telephone Exchange.—Chesapeake & Potomac Telephone Co. will build another modern exchange building and install equipment for about 12,000 instruments. Plans are being prepared. About \$100,000 will be expended for equipment and about \$25,000 for site and building.

Baltimore—Varnish Works.—Incorporated: Standard Varnish and Oil Works, for manufacturing and dealing in all kinds of paints and oils, by Louis W. New, D. Milton Bremer, W. Harry Kratz, Edward A. Geiger and Phillips F. Lee. The capital stock is \$25,000.

Baltimore—Steam Laundry.—Elite Laundry Co. has been incorporated by John W. Lowe, George A. Kilnefelter, Benjamin F. Bennett and William N. Slack of Baltimore, and John H. Brough of Hanover, Pa. The



capital stock is \$100,000. Plant is established. Cambridge—Woodenware Factory.—Dorchester Butterditch & Manufacturing Co. will rebuild its burned woodenware factory.\*

Cumberland—Planing Mill.—Incorporated: Potomac Planing Co., capital stock \$10,000, by George T. Dunn, John J. Dressman, Sol George, A. H. Fogtman, Ambrose Laurence, William L. Lealls and others.

Garrett County—Coal and Timber Lands.—Dubois & Bond Bros. of Piedmont, W. Va., expect to build lumber plant with capacity of 50,000 feet daily, and probably open mines and manufacture coke.

Hagerstown—Bicycle Works.—American Bicycle Co. (offices in New York) will enlarge its works, installing new steam power plant, electric plant and other machinery.

Hancock—Gas and Oil Wells.—Dawson Oil & Gas Co. has incorporated, with capital of \$30,000, to drill for oil and gas; Peter E. Dawson, president; John Stigart, secretary.

Mt. Savage—Fire-Brick Works.—Chartered: Big Savage Fire-Brick Co., to open coal and clay mines and make brick. The capital is \$100,000. The directors are Edward Hasslett, Wheeling, W. Va.; Otto Frey, Pittsburgh, Pa.; Howard H. Dickey and Harry E. Weber, Cumberland, Md.; Davison Armstrong, Frostburg, Md., and others.

Washington, D. C.—Commission Merchants.—Chartered: Whitford Bros. & Co., capital \$20,000; Edward O. Whitford, president; George L. Whitford, treasurer, and Onslow S. Whitford, secretary.

Washington, D. C.—Electric Plant.—Washington Electric Railway Co. proposes building a power-house addition at a cost of about \$100,000. Sunderland Bros., Twelfth and C streets N. W., are the engineers.

Washington, D. C.—Conduit System.—District commissioners have accepted plans for the extension of conduit system seven and one-half miles.

#### MISSISSIPPI.

Aberdeen—Cotton Mill.—Aberdeen Cotton Mills, recently reported incorporated, has organized with directors W. W. Watkins, D. P. Holliday, W. N. Payne and W. G. Sykes of Aberdeen, and W. M. Stokes of Cordova, Ala.; capital is \$200,000; other details not decided yet; D. P. Holliday, president.

Columbus—Cottonseed-oil Products.—Lewis & Co. will establish plant for the manufacture of cottonseed-oil products.

Landon—Brick Works.—Incorporated: Landon Brick & Tile Co., capital stock \$20,000, by L. N. Dantzer, Jr., Joseph W. Bozeman and H. W. Wilson.

Marion—Mercantile.—Chartered: B. A. Weems & Co., general mercantile business, capital stock \$50,000, by B. A. Weems, E. Foxworth and B. Weems.

McNeil—Lumber Plant.—Incorporated: Clifton Lumber Co., capital stock \$10,000, by Jerry Hinton, J. W. Turner, B. A. Watson and C. W. Robinson.

Natchez—Cotton Gins.—S. H. Lowenburg, O. N. Wilds and F. B. Postelthwaite have incorporated O'Ferrell Gin Co., with capital of \$20,000. Company has purchased and will enlarge established ginnyery.

Natchez—Lumber Manufacturing.—Hill Lumber & Manufacturing Co., capital stock \$20,000, has been chartered by E. A. Hill and A. B. Leonard.

Purvis—Lumber Manufacturing.—Chartered: Weems Manufacturing Co., to manufacture lumber; capital stock \$30,000; incorporators, B. A. Weems, A. V. Weems, E. Foxworth and B. Weems.

#### MISSOURI.

Farmington—Water-works.—About \$25,000 will be expended for the water-works reported last week; Laufketter-Bendit M. E. Co., 810 Olive street, St. Louis, engineers in charge.\*

Kansas City—Cotton Mill.—Kansas City Cotton Mills Co. is being formed, with capitalization of \$10,000,000, to establish cotton mill of 500,000 spindles, 12,000 looms and complement to manufacture sheetings, drills, etc. It is planned to utilize 2000 acres of land for the plant and mill village of operatives' cottages, water supply and lighting plant, etc. Operations are to begin with 50,000 or 100,000 spindles installed, and the remaining machinery will be purchased and all necessary facilities therefor be provided as rapidly as possible. The directors will include Edward F. Swinney, W. S. Woods, Edward L. Scarritt, Henry C. Flower and Witten McDonald of Kansas City, Mo.; John R. Mulvane, Edward Wilder and Joab Mulvane of Topeka, Kan.; A. A. Robinson of Mexico City, W. B. Smith Whaley of Columbia, S. C., and four additional representatives of the Eastern stockholders yet to be named. Eastern and Western capitalists have already subscribed for \$3,100,000 of stock and

\$1,550,000 of bonds. Messrs. McDonald and Whaley of Columbia, S. C., have promoted the enterprise, and Mr. Whaley will be president and manager. Address company at its offices, 102 New York Life Building, Kansas City.

Kansas City—Electric-power Plant.—Ford, Bacon & Davis (main offices, 149 Broadway, New York) are preparing plans at their branch office, 1500 Grand avenue, for the Metropolitan Street Railway's proposed \$2,000,000 electric-power plant.

St. Louis—Plastering.—John Fitzgerald, Claude B. Hall, N. E. Powers and others have incorporated John Fitzgerald Plastering Co., with capital of \$2500.

St. Louis—Candle Factory.—Goodwin Candle Manufacturing Co. will rebuild its candle factory recently burned.

#### NORTH CAROLINA.

Asheboro—Lumber Mill.—Crown Milling Co. has doubled its capital, completed 75x100-foot additional building and installed machinery for manufacturing 25,000 feet of lumber daily.

Dunn—Electric-light and Water Works.—City will construct water-works and electric-light plant. John W. Hays, Petersburg, Va., will prepare the plans and direct construction work.\*

High Point—Gold Mine.—M. A. Popkees will reopen a gold mine.

Lexington—Lumber Company.—B. P. Tate, J. C. Leonard, E. A. Rothrock, B. H. Henkle and others have incorporated Old Fort Lumber Co., with capital of \$8000, and privilege of increasing to \$30,000.

Nashville—Oil Mill.—R. U. Brooks, S. G. Griffin, R. A. Cooley, J. T. Strickland and others have incorporated Farmers' Oil Mill Co., with authorized capital of \$100,000.

New Bern—Bottling Plant.—Lee Taylor has established the Crown Bottling Works.

Oxford—Mining.—Incorporated: Pontiac Mining Co., to operate in North Carolina and Virginia, with a capital of \$100,000. The directors are Robt. W. Lassiter of Oxford, N. C.; Harry C. Duval, William Lamb of Brooklyn, N. Y.; William R. Brown, A. G. Vreeland, A. O. Sumner, Frank Butterworth, New York city; Commodore P. Vedder of Ellcottville, N. Y., and Heron Butterworth of Morristown, N. J.

Swannanoa—Gold Mining.—It is reported that R. B. Ross (colored) has begun developing gold deposits.

#### SOUTH CAROLINA.

Anderson—Cotton Mill.—H. C. Townsend Cotton Mill has been incorporated to own and operate cotton-twine mill previously reported to be established by H. C. Townsend; electric-power will be used. Stuart W. Cramer of Charlotte, N. C., is architect in charge.\*

Batesburg—Electric Plants.—Incorporated: Saluda River Electric & Construction Co. of Batesburg, to furnish electric lights, power, etc., by A. G. La Motte of Columbia, S. C.; J. Wm. Mitchell and E. F. Strother of Batesburg.

Batesburg—Cotton Ginning.—Incorporated: Batesburg Ginning Co., capital stock \$6000, by M. E. Rutland and T. B. Kernaghan of Batesburg, A. C. Phelps and A. M. Withers of Columbia, S. C.

Blacksburg—Implement Works.—Incorporated: Carolina Agricultural Implement Manufacturing Co. is to manufacture agricultural machines, implements, capital stock to be \$25,000. Incorporators are John F. Jones of Blacksburg and W. B. Castles of Hickory Grove, S. C.

Charleston—Oil Refineries.—Independent Refining Co., recently chartered, has effected organization with Morris Israel, president; I. S. Cohen, secretary, and Robt. K. Dargan, general manager. This company has acquired control of the Atlantic Refinery, which plant will be greatly enlarged and improved. It will also handle the crude cottonseed oil from seventy-five independent mills throughout the Carolinas and Georgia, which means about 2,600,000 gallons of the raw material.

Clio—Cotton Gins.—Chartered: Clio Ginning Co., with E. Sternberger, president; Jos. Strauss, secretary, and H. E. Wells, vice-president.

Columbia—Machine and Iron Works.—Columbia Machine and Iron Works, reported with \$10,000 capital last week, has organized with C. G. Guindard, president; C. Atkinson, secretary, and A. M. Gibbes, treasurer. Machine tools have been purchased, but not balance of equipment. Electric-power will be used.\*

Columbia—Mineral Waters.—W. D. Bates and B. W. Bates have incorporated "The Fountain," with capital of \$17,500, to sell mineral waters, etc.

Georgetown—Water and Sewerage Systems.—City will vote July 29 on issuing bonds for water-works and sewerage system. Address "The Mayor."

Greenville—Supplies.—Incorporated: Gower Supply Co., with capital stock of \$20,000.

Lexington—Lumber Company.—Chartered: Roof & Barre Lumber Co., capital stock \$20,000, by W. P. Roof and W. B. Barre.

Lowndesville—Knitting Mill.—E. R. Horton will probably establish knitting mill.\*

Pineville—Telephone System.—S. L. Meacham has applied for telephone system franchise.

Rock Hill—Manufacturing, etc.—Chartered: Standard Drug & Manufacturing Co. of Rock Hill, capitalized at \$8000; Myron H. Sandifer, president; A. J. Evans, vice-president, and C. M. Kuykendall, secretary.

Sumter—Mercantile.—C. L. Stubbs and S. W. Stubbs have incorporated Stubbs Bros. Co., with capital of \$5000.

Sumter—Mercantile.—W. W. Horn and J. H. Bass have incorporated the Horn Dry Goods Co., with capital of \$5000.

Yorkville—Copper Mine.—Duncan Ferguson, Jr., representing Ferguson & Dare of Pittsburgh, Pa., is optioning with the view to purchase and development of copper deposits near Yorkville.

#### TENNESSEE.

Bristol—Barytes Mill.—John T. Williams of New York city will erect \$30,000 plant to mill ores from his barytes lands. Main building will be 50x100 feet. There will also be coopers department, workhouse and room for six boilers of 100 horse-power each. John H. Ruck is local representative.

Chattanooga—Distillery.—S. S. Price and H. C. Abercrombie have organized Chattanooga Distillery Co., with capital of \$100,000, to establish plant; will erect 30x60-foot building and install machinery to produce about 175 gallons daily; will also erect 20x30-foot granary and other buildings. J. S. Cannon will be manager.

Chattanooga—Iron Furnaces, Coal Mines, etc.—Plans are being formed for the organization of a company with capital of at least \$1,000,000 for the construction of two iron furnaces, development of coal mines, manufacture of coke, etc., and eventually the establishment of steel plant. It is said that the most prominent iron and steel manufacturers of Alabama and the country are interested.

Clinton—Milling.—Incorporated: Clinton Milling Co., capital \$10,000, by R. P. Crowder, W. S. McKamey, F. D. Griffiths, L. M. Briddle and T. H. Scott.

Daisy—Coal Mines.—American Coal & Railway Co. of New York city has purchased from Joseph G. Aydelott of Tullahoma, Tenn., the Daisy Coal Co. and mines for \$20,750.

Knoxville—Knitting Mill.—It is reported Knoxville Knitting Mill Co. will erect additional building and install more machinery.

Loudon—Electric-light Plant.—Loudon Manufacturing Co. (lumber) will install electric-light plant in October.

Mascot—Zinc Mines.—Roseberry Zinc Co. (lately reported organized with capital of \$200,000 under Knoxville, Tenn.) will develop zinc deposits near Mascot. Considerable machinery has been purchased, including equipment for the proposed 200-ton concentrating plant, and this is now being erected. M. A. Hollman is architect in charge.

Memphis—Candy Factory.—Novelty Candy Co. has been organized, with P. Haggitt, president; F. A. Lohmeyer, vice-president, and Chas. W. Lohmeyer, treasurer, each of New York city. J. A. Hollowell of Norfolk, Va., will be local manager. Address, care of Memphis Industrial League.

Memphis—Oil Company.—Incorporated: Ozark Oil Co., with capital stock of \$10,000, by M. H. Ward, D. W. Hughes, J. T. Buford, T. C. Buford and S. M. Chambliss.

Nashville—Live-stock.—W. C. Haley, J. C. Haley, John Philpot and others have incorporated W. C. Haley & Sons Live-Stock Co., with capital of \$5000.

Nashville—Coal Mines.—Fentress Coal & Coke Co. is preparing to expend about \$250,000 for opening and equipping two mines and mining plants on the Tennessee Central Railroad.

Nashville—Telephone Company.—W. S. Ross, J. L. Ross, George Hays and others have incorporated Warren County Telephone Co.

Nashville—Fertilizer Factory.—National Fertilizer Co. contemplates expending \$75,000 to build acid chambers, and thus double capacity of its factory.

Parsons—Phosphate Plant.—Beech River Phosphate Co. will be incorporated by T. S. Hughes, L. H. Burke, John A. Pitts, R. M. Dudley and John M. Gray, Jr., with capital

stock of \$150,000, to mine phosphate, erect plant, etc. L. H. Burke is engineer in charge. Troy—Flour Mill.—W. J. Myers & Bro. will build flour mill.\*

#### TEXAS.

Amarillo—Grocery.—Incorporated: Kemp-Amarillo Grocery Co., capital stock \$60,000, by M. Lasker, J. A. Kemp and C. W. Wilson.

Ambia—Gin and Mill.—Incorporated: Farmers' Gin & Milling Co., with capital of \$6000, by J. W. Warren, C. T. Park and W. R. Dudley.

Ballinger—Telephone Company.—Central Texas Telephone Co. has increased capital stock from \$50,000 to \$75,000.

Cisco—Water-works.—City has chosen site for proposed new dam, and will arrange to ask for bids on extensive enlargements and improvements of municipal water-works. Address "The Mayor."

Crockett—Electric-light Plant.—Crockett Light & Ice Co. will rebuild, on an enlarged scale, its electric-light plant and ice factory recently destroyed by fire.

Fort Worth—Foundry and Machine Shop.—Incorporated: Fort Worth Machine & Foundry Co., capitalization \$30,000, by Lee M. Rumsey, George F. Speer and John W. Wray.

Galveston—Cottonseed delinting Plant.—E. H. Young is endeavoring to organize company to build \$25,000 plant for delinting cottonseed for export.

Houston—Woodworking Plant.—E. H. Harrell Lumber Co. has let contract to Douthitt & Meyer for erection of planing mill and general woodworking plant that will cost \$50,000.

Lewisville—Water.—J. N. Kealy, L. M. Kealy, W. W. Sharrill and others have incorporated Lewisville Water Co., with capital of \$2500.

McGregor—Drug Company.—Chartered: McGregor Drug Co., capital stock \$6000, by H. Behrens, R. N. McKnight, J. E. Brown, W. W. Jackson and others.

Mineola—Furniture Factory.—Mineola Furniture Co. has begun rebuilding its factory recently destroyed by fire.

Mingus—Mercantile.—Incorporated: Mingus Mercantile Co., capital stock \$5000, by Phil Gaither, J. B. Corbett, Louis Stahl, all of Dallas, Texas.

Orange—Paper Mill.—J. W. Link, W. H. Stark, L. Miller, Michael Hesser and E. K. Smith have incorporated Orange Paper Co., with capital stock of \$100,000, to manufacture paper, etc.

Plano—Grain Company.—Incorporated: J. T. Stark Grain Co., capital stock \$25,000, by J. T. Stark, Olney Davis and Walter Jenull.

San Antonio—Shoe Company.—Incorporated: Guaranty Shoe Co., with capital stock of \$15,000, by H. C. King, J. McC. Watson and Henry Ruff.

Tyler—Lumber Manufacturing.—Chartered: Tyler Box & Lumber Manufacturing Co., capital stock \$25,000, by J. F. Christian, M. M. Davidson and S. W. Tipton.

#### VIRGINIA.

Alexandria—Glass-bottle Works.—Belle-Pre Bottle Co., reported last week, has let all contracts for its factory; offices, Columbian Building, 416 Fifth street N. W., Washington, D. C.\*

Alexandria—Farm Products.—Whitford Bros. Co. has been incorporated, with capital stock of \$20,000.

Berkley—Central Power Plant.—A correspondent states arrangements have been completed for establishment of a central plant to furnish power by electricity to nearby manufacturing industries. The plant is to consume as fuel waste from local lumber mills. Possibly Theo. Tunis, Merchants' Bank Building, Baltimore, Md., can give information.

Berkley—Lumber Plant.—Surry Lumber Co. has purchased additional mill property, and will improve it by adding shook machinery, etc.

Berkley—Lumber Plant.—Atlantic Shook & Lumber Co., recently incorporated with \$25,000 capital, will at once erect buildings and install machinery for lumber plant; C. W. Rockefeller, president.\*

Bristol—Tobacco Factory.—Reynolds Tobacco Co. has increased capital from \$250,000 to \$500,000, and will expend a large amount to enlarge and improve its factory.

Bristol—Ice and Cold-storage Plant.—Bristol Produce & Cold Storage Co. has been incorporated, with capital of \$50,000, by W. H. Hicks & Co., M. V. Ambler & Co., C. W. Palmer & Bro. and others, and will erect abattoir, cold-storage house and ice plant.

Graham—Tobacco Manufacturing.—Union Tobacco Co. has been incorporated, with capital of \$25,000, to manufacture tobacco. J. S. Davenport is president.

**Martinsville—Telephone System.**—Martinsville Telephone Co. will make improvements to its system.

**Norfolk—Shipbuilding Plant.**—The Norfolk & Hampton Roads Shipbuilding & Dry-Dock Co. has organized, electing Joseph B. Sanford of Baltimore, Md., and Norfolk, president; G. W. Atkinson of Charleston, W. Va., vice-president; Nathaniel Beaman, treasurer; D. P. Blount, secretary. Seventeen directors were elected, of whom four are Norfolk men. The company's plans to build a \$10,000,000 plant at Sewall's Point, near Norfolk, are said to be assured. Reports as to this enterprise as planned were made several months ago. Address company, care C. W. Tebault, its promoter, Norfolk. Henry Bruster, an experienced shipbuilder of Baltimore, Md., will be general manager.

**Norfolk—Publishing.**—Incorporated: Record Reporter Publishing Co., capital \$5000, with B. G. Smith, president; W. R. Roberts, secretary-treasurer.

**Norfolk—Steel Plant.**—It is stated financial arrangements have been completed for establishment of the steel plant recently reported as proposed. Proposed extent of the investment is not stated, but plans and specifications are ready for the beginning of work as soon as a few minor details have been completed. The product will be principally patent steel I railroad ties. Benj. R. Orme and James E. York of New York city and Albert R. Gorter of Baltimore, Md., are the projectors.

**Norton—Mercantile.**—Huff, Andrews & Thomas Co. of Bluefield, W. Va., and Huff, Andrews & Moyer Co. of Roanoke, Va., will establish branch wholesale grocery at Norton, with W. H. Thomas, president; J. W. Penn, secretary, and E. L. Dameron, general manager; capital stock is \$20,000; building will be 175x48 feet, three stories, frame, iron siding, and metal roof.

**Portsmouth—Industrial.**—Portsmouth Industrial Development Co. has been organized, with capital of \$5000, and C. W. Steele, Port Norfolk, president; A. J. Phillips, Portsmouth, vice-president; M. W. Nasson, Norfolk, secretary.

**Portsmouth—Railway Shops.**—It is rumored the Norfolk & Western Railway Co. (New York office at 40 Exchange Place) contemplates establishing new shops. E. P. Burnett of Roanoke, Va., is purchasing agent.

**Richmond—Plumbing Company.**—Incorporated: Richmond Plumbing & Mantel Co., for plumbing, tinning, gasfitting, sheet metal, tiling, electrical wiring, etc., with a capital stock of \$25,000; president, J. Graham Davidson; vice-president and manager, W. T. Yarbrough; secretary and treasurer, H. T. Burnley; directors, the above and J. Temple and T. K. Sands.

**Suffolk—Steamboat Line.**—Virginia & Carolina Transportation Co. has been incorporated, with capital stock of \$25,000. J. R. Knight is president; J. M. Story, vice-president; W. T. Pace, secretary, and C. C. Vaughan, Jr., treasurer.

**Winchester—Telephone System.**—United Telephone Co. of Philadelphia, Pa., has purchased Winchester Telephone Co. and system. Extensive improvements will be made and the lines extended.

#### WEST VIRGINIA.

**Bluefield—Brick Works.**—United States Coal & Coke Co. (subsidiary to United States Steel Corporation of New York) will establish plant at Bluefield for the manufacture of brick. Daily capacity will be 20,000, and the brick is to be used for constructing the company's proposed numerous coke ovens in connection with its coal-mining and coke-manufacturing operations on Tug river. T. N. Wilson of Layton, Pa., has charge of erecting the plant. As mentioned last week under Pocahontas, W. Va., Thomas Lynch, president of H. C. Frick Coke Co. of Pittsburgh, Pa., will be elected president of this company.

**Charlestown—Woodworking Factory.**—Frank H. Dukessmith will establish plant for the manufacture of hardwood furniture specialties.

**Fairmont—Coal Mines and Coke Ovens.**—C. E. Connaway and Chas. E. Hawker of Fairmont, A. S. R. Overholt and Clyde Overholt of West Overton, Pa., have incorporated Overholt Coal & Coke Co., with capital of \$300,000, to develop coal mines and manufacture coke.

**Grafton—Box Factory.**—It is reported R. W. Kennedy, John Ruhl, O. P. Stroh and others will establish \$50,000 box factory.

**Grafton—Coal Lands.**—Tygart's Valley Coal & Coke Co. has purchased an additional tract of 2500 acres of coal land, and will develop same.

**Morgantown—Bridges, etc.**—Chartered:

**South Morgantown Bridge & Improvement Co.**, for the construction of bridges, etc.; capital stock \$500,000; incorporators, Samuel McGara and Chancey D. Willey of Morgantown, Guy A. Wagner and Dwight H. Wagner of Wheeling, W. Va., and John Wagner of Fairmont, W. Va.

**Morgantown—Prismatic Glass Works.**—It is rumored that a company will be organized to manufacture prismatic glass in large sheets. Prof. F. L. O. Wadsworth, Western University of Pennsylvania, and W. A. Page, both of Pittsburg, Pa., are said to be interested.

**Moundsville—Glass Works.**—Fostoria Glass Co. will increase its capital from \$264,000 to \$504,000 for improvements; will build another factory building, another furnace, and install machinery for manufacturing full line of blown glassware.

**Valley Falls—Electric Plant.**—Valley Falls Power Co. has been incorporated, with capital stock of \$50,000, to develop water-power and erect electric plant, by Jas. B. Canning, E. D. Bradshaw, Lloyd Canning of Valley Falls, John T. McGraw and Geo. W. Whitescarver of Grafton, W. Va.

**Welch—Coke Ovens.**—Cherokee Colliery Co. is preparing to construct 200 coke ovens.

#### INDIAN TERRITORY.

**Ardmore—Printing Plant.**—Appeal Printing Co. has been incorporated, with capital of \$10,000, to conduct printing plant and publish newspaper. F. F. Fox is president; A. C. Owens, secretary, and F. M. Fox, treasurer.

**Ardmore—Lumber-yards.**—Chickasaw Lumber Co. has been incorporated, with capital stock of \$30,000, to conduct lumber-yards. C. L. Byrne is president; W. C. Baker, vice-president; Frank M. Gates, secretary, and J. A. Bivens, treasurer.

**Muskogee—Water-works.**—City will construct water-works after plans by Burns & McDonnell, designing engineers, Postal Telegraph Building, Kansas City, Mo. They can furnish pamphlet of information on application. Sam T. McMurtry is city register.

**Muskogee—Townsite.**—Geo. Sparks, Jesse Hill, C. E. Speers and others have incorporated Fort Smith & Western Townsite Co., with capital of \$20,000.

**South McAlester—Bridge Company.**—Chartered: Chickasha Bridge & Improvement Co., with a capital of \$15,000. H. B. Johnson is president; B. P. Smith, vice-president; R. G. Latting, secretary; W. J. Stone, treasurer.

#### OKLAHOMA TERRITORY.

**Lawton—Oil Company.**—Incorporated: Traveling Men's Oil Co., with \$500,000 capital stock, by T. P. Hardwood, M. M. Holmes, Frank McMaster, J. R. Lewis and J. S. West.

**Oklahoma City—Improvements.**—Chartered: Oklahoma Improvement Co., \$15,000 capital stock, by William D. Howard of Los Angeles, Cal.; Leslie D. Rankin and John Pomeroy of Oklahoma City.

**Oklahoma City—Bed-spring and Mattress Factory.**—A. S. Rhodes of Chattanooga, Tenn., will establish bed-spring and mattress factory.

**Oklahoma City—Furniture.**—L. E. Pratt of Oklahoma City, J. W. Wright of New Orleans, La., and R. G. Morrow of Memphis, Tenn., have incorporated Oklahoma Furniture Co., with capital of \$50,000.

#### BUILDING NOTES.

**Annapolis, Md.—Mess Building.**—Plans and specifications for United States Naval Academy's proposed \$100,000 mess building are on view at Builders' Exchange, Baltimore; building to be of brick and granite, 65x100 feet, three stories and basement.

**Baltimore, Md.—Zoological Building.**—Wyatt & Nolting will prepare plans for zoological building for Frank Bostock. E. M. Noel has contract to erect.

**Baltimore, Md.—Hotel and Theater.**—D. W. Thomas will have contract to build Jas. L. Kernan's proposed hotel and theater, for which \$500,000 will be expended, reported last week. J. A. Allen of Philadelphia, Pa., will at once prepare finished plans and specifications.

**Beaumont, Texas—Church.**—A. H. Dawson Architect Co. of Houston, Texas, will open bids July 5 for construction of church; plans, etc., now on view. Bonds for \$15,000 will be required of contractor.

**Big Springs, Texas—Temple.**—Morgan Evans of Fort Worth, Texas, has contract for construction of brick temple.

**Chattanooga, Tenn.—Church.**—St. James M. E. Church will build an edifice to cost \$12,000.

**Clarksburg, W. Va.—School.**—Hobbs & Co. have contract to erect \$8000 school building.

**Columbia, S. C.—Factory Building.**—Henry

Horne will erect trousers factory building and a carriage repository after plans by Frank P. Milburn.

**Crowley, La.—Business Block.**—H. Roos Company has let contract to C. L. Hornell for erection of brick business block 65x100 feet.

**Fort Monroe, Va.—Armory Building.**—Plans by P. Thornton Mayre of Richmond, Va., have been accepted for proposed \$20,000 Y. M. C. A. building.

**Fort Worth, Texas—Business Building.**—Wadsworth, Cameron & Co. have let contract to J. W. McPherson of Hico, Texas, at \$12,376 for construction of building 50x150 feet, of brick and stone, automatic sprinklers, elevators, etc. W. A. Davies has brick-work contract. Plans by M. L. Waller.

**Gaffney, S. C.—College Building.**—Limestone College has let contract to L. Baker for construction of \$10,000 building.

**Gainesville, Ga.—Residence.**—R. O. Greene will build residence.

**Gardenville P. O., Md.—Rectory.**—Rev. H. S. Nagengast, pastor of St. Anthony's Church, will build rectory to cost about \$5000, after plans by either Thos. C. Kennedy or Baldwin & Pennington of Baltimore. Structure to be two stories high, with basement, 30x50 feet, of bluestone and brick, to be equipped for gaslighting, steam-heating, with baths and others modern conveniences.

**Greenwood, S. C.—Bank Building.**—Bank of Greenwood contemplates erecting an office building.

**Hadley, W. Va.—Hotel.**—Elijah Adkins will build 16-room hotel.

**Houston, Texas—Hotel.**—Henry House will erect hotel addition, five stories, fireproof, eighty guest chambers, sheet-steel ceilings, baths, toilets, telephones, etc.

**Jackson, Miss.—Cottages.**—Institution for Deaf and Blind has let contract to Mann Building & Construction Co. of Vicksburg, Miss., at \$21,536 for erection of five cottages.

**Lawton, O. T.—Theater.**—J. W. Martin proposes building an opera-house.

**Lexington, Ky.—Library.**—Carnegie Library has accepted plans by H. L. Rowe for construction of building to cost about \$50,000.

**Little Rock, Ark.—Business Building.**—H. L. Remmel will erect business building 25x100 feet, two stories high, of pressed brick, after plans by Chas. L. Thompson.

**Louisville, Ky.—Warehouse.**—J. B. Hutchins has made plans for five-story brick warehouse for Louisville Paper Co.

**Louisville, Ky.—Police Station.**—Thomas & Bohne have prepared plans for fire patrol and police station building.

**Louisville, Ky.—Office Building.**—National Trust Co.'s office building, reported last week, will constitute a remodeling contract, from \$55,000 to \$80,000 to be expended. Dodd & Cobb, Equitable Building, are architects in charge. Contract will probably be let by July 10.

**Marlin, Texas—School.**—Wm. Shelton, mayor, opens bids today for erection of schoolhouse, after plans by Messer & Smith of Waco, Texas.

**Morgan, Texas—School.**—Sealed proposals will be opened at First National Bank July 7 for erection of brick veneer school building. Plans on file at bank and at office of Glenn Allen, architect, Provident Building, Waco.

**New Orleans, La.—Office Building.**—Hibernia Trust & Banking Co. has ordered D. H. Burnham of Chicago to prepare plans and specifications for \$1,000,000 building, twelve stories high, 100x140 feet, to contain 350 offices.

**New Orleans, La.—Auditorium.**—New Orleans Auditorium Co. is being organized to erect auditorium to seat 15,000 to 20,000 people. Paul Capdeville is president.

**Norfolk, Va.—Warehouse, etc.**—Hoster Brewing Co. of Columbus, Ohio, will erect warehouse and stables, as reported last week, but cost will be only about \$12,000. Vance Hebard, 76 Charlotte street, is architect in charge.

**Oklahoma City, O. T.—Business House.**—A. M. Barber, Frank Gault and others will erect business house.

**Pine Bluff, Ark.—Buildings.**—R. H. Hunt of Chattanooga, Tenn., is preparing plans for \$5,000 buildings.

**Pulaski, Va.—School.**—Pulaski School Co. has let contract to Geo. R. Cheves for construction of school 45x75 feet, three stories high.

**Richmond, Va.—Penitentiary.**—P. Thornton Mayre's plans have been accepted for proposed fireproof cell building for State penitentiary. Structure will be a steel shell with five tiers of cells, 334 in all, with interlocking system, heating, power and lighting plants, improved ventilating system, 102 shower baths, etc. About \$180,000 will be expended.

Address "Secretary of Penitentiary Commission."

**San Antonio, Texas—Church.**—First Presbyterian Church will erect edifice, to cost \$25,000. Rev. Arthur Jones is pastor.

**Savannah, Ga.—Apartment-houses.**—J. S. Cooper and A. A. Artley will build apartment-houses.

**Shelbyville, Tenn.—Theater.**—W. A. Frost proposes forming company to build theater.

**Spring Hill, Tenn.—School.**—Braham & Hughes School will place contract for erection of \$6000 addition to school building.

**St. Louis, Mo.—Hotel.**—Ernest G. Bruckman will organize company to build \$1,000,000 hotel. Eames & Young, Lincoln Trust Building, have drawn sketches for 14-story building.

**Valdosta, Ga.—Mercantile Building.**—W. H. Briggs Hardware Co. will remodel building, installing new front of plate glass and iron columns, new shelving, etc. L. E. Brown is architect in charge.

**Versailles, Ky.—Seminary Building.**—Ashland Seminary has not yet contracted for the additional buildings mentioned last week. Steam heat, water-works and numerous bathrooms will be installed. H. L. Rowe, Box 386, Lexington, Ky., is architect in charge.

**Waxahatchie, Texas—Dormitory.**—D. Mahoney has contract at about \$9000 to erect dormitory.

**Wrights Mill (P. O. at Opelika), Ala.—Hotel.**—Boston capitalists represented by H. D. Capers of Auburn, Ala., propose building a hotel.

#### RAILROAD CONSTRUCTION.

##### Railways.

**Amity, Ark.**—A committee has been appointed by business men of Amity to take steps toward securing a railroad to the town.

**Asheville, N. C.**—It is reported that the Southern Railway will extend the South Carolina & Georgia Extension Railway from Marion to Johnson City, Tenn. C. H. Ackert is general manager; office at Washington, D. C.

**Baltimore, Md.**—It is reported that the Baltimore & Ohio Railroad Co. has decided to build the proposed low-grade freight line around Martinsburg, W. Va. It will be twenty-three miles long from Harper's Ferry to Wilson, two miles west of Martinsburg. G. L. Potter is general manager; office at Baltimore.

**Bristol, Va.—Tenn.**—George L. Carter of Bristol and associates have, it is understood, formally acquired the Ohio River & Charleston Railway, which is to be extended to Lincoln, N. C.

**Burnet, Texas.**—About twenty-five miles of line on the Houston & Texas Central extension from Burnet to Lampasas is yet to be let to subcontractors. J. P. Hughes is the general contractor at Burnet, Texas.

**Chickasha, I. T.**—It is reported that the Chicago, Rock Island & Pacific Railway Co. will build an extension from Chickasha to Erin Springs. H. A. Purker is vice-president in charge of operating; office at Chicago, Ill.

**Chillicothe, Mo.**—A committee appointed by the mayor has obtained, it is stated, nearly all the rights of way for the proposed electric line from Chillicothe to Trenton.

**Cumberland, Md.**—A contract has been awarded, it is understood, for building a three-mile branch from the West Virginia Central Railway along Abrams creek. C. L. Bretz is general manager of the West Virginia Central; office at Cumberland.

**Cumberland, Md.**—F. F. Merriman of Honesdale, Pa., and J. W. Walker of Philadelphia are reported to be interested in a plan to build a railroad from Alexandria, Va., to coal lands in the vicinity of Wardsville, W. Va. Morton Harloe of Hawley, Pa., and W. E. Harloe of High View, W. Va., are also reported to be interested.

**Durango, Mexico.**—Engineers for the Mexican International Railroad have started to survey, it is reported, a line to run nearly due west to Mazatlan, on the Pacific coast. L. M. Johnson is general manager; office at Ciudad Porfirio Diaz, Mexico.

**Fort Worth, Texas.**—It is reported that the extension of the Oklahoma & Texas Southern Railroad from Nocona to Montague means the beginning of a line via Stephenville and Houston to the Gulf, a total distance of about 300 miles. E. E. Churchill of Fort Worth is general manager.

**Fort Worth, Texas.**—The Weatherford, Mineral Wells & Northwestern Railroad Co. has received material to build forty-five miles of the extension to Graham. L. M. Fouts is president and general manager; office at Weatherford, Texas.



Gallatin, Tenn.—Mayor James W. Blackmore of Gallatin writes to the Manufacturers' Record that he is interested in the plan for building a railroad from Gallatin to the Cumberland river, three miles, only as mayor of the town. An effort is being made to induce parties with capital and practical experience to look into the project.

Georgetown, Texas.—It is reported that the International & Great Northern Railroad proposes to build an extension from Georgetown to Florence, about twenty miles. Leroy Trice is vice-president and general manager; office at Palestine, Texas.

Guthrie, Okla.—The Arkansas Valley & Western Railroad, said to be a St. Louis & San Francisco line, has filed its mortgage for \$3,500,000 to build from Tulsa, I. T., via Pawnee and Perry to Enid, Okla. B. L. Winchell is general manager of the Frisco system; office at St. Louis.

Hancock, Md.—Engineers are making a preliminary survey from Hancock to Burnt Cabins, Pa., for a railroad which, it is reported, the Baltimore & Ohio will build. G. L. Potter is general manager of the B. & O.; office at Baltimore. J. L. Stuart of Washington, D. C., is supervising the survey.

Huntington, W. Va.—The Camden Interstate Railroad Co. of Huntington has sold to John Graham and Edmund McCandish of Newville, Pa., and John J. Henry and Wm. North of Philadelphia all its electric lines in Huntington, Central City, Ceredo and Kenova, W. Va.; Catlettsburg and Ashland, Ky., and Ironton, Ohio. The deal includes electric-light plants.

Laurel, Miss.—It is rumored that the Ellisville & Laurel Railroad will be connected with the line of the Tallahalla Lumber Co., and that the latter will be extended to Pascagoula.

Little Rock, Ark.—Mr. J. F. Holden, general manager of the Choctaw, Oklahoma & Gulf Railroad, writes the Manufacturers' Record that there is "nothing in" the reports that the company will build from Guthrie to the Gulf of Mexico via Denison, Texas, and from Amarillo, Texas, to Albuquerque, New Mexico.

Lufkin, Texas.—The Texas & Louisiana Railway has amended its charter, providing for an extension from Windham to Newton, seventy-five miles. E. A. Frost is general manager; office at Lufkin, Texas.

Memphis, Tenn.—The Union Railway Co., of which H. L. Brinkley is president, has accepted the ordinance granted by the city council conveying certain franchises.

Memphis, Tenn.—The Illinois Central plans for Memphis, it is understood, provide for elevating the tracks on the river-front, for erecting shops, for building a freight depot and for double-tracking the line. J. T. Harahan is general manager; office at Chicago.

Memphis, Tenn.—The Memphis, Arkansas & Texas Railroad Co. has appointed a committee consisting of C. W. Schulte, Henry Duffin, J. R. Jarrett and George Gilliam to make any contracts and negotiations for the interest of the company. The company organized by electing George Arnold, president; H. P. Rogers, vice-president; George Gilliam, secretary and treasurer.

Mexico, Mex.—H. R. Nickerson, vice-president and general manager of the Mexican Central Railway, writes the Manufacturers' Record regarding the report that the company will build to Saltillo, and saying: "No steps have yet been taken toward building an extension."

Mexico, Mex.—H. R. Nickerson, vice-president and general manager of the Mexican Central Railway, is quoted as saying that the building of a short line to Texas is practically assured. Reports from Monterey state that a survey is being made toward the Texas State line. The Central would, it is stated, thus establish a short route from Mexico to the United States by way of its new extension to Tampico, thence on the Gulf division to a point near Monterey, whence another extension would be made to Texas.

Montgomery, Ala.—The Southern Railway has filed its declaration to build several small branch lines in the mining region of Northern Alabama. C. H. Ackert is general manager; office at Washington, D. C.

Nashville, Tenn.—The Tennessee Central Railroad has, it is reported, let a contract to Smith & Brady, who graded the yards at Nashville, for building part of the route around the city. Jere Baxter is president; office at Nashville.

Navasota, Texas.—The city council has granted the International & Great Northern Railroad rights of way through Navasota, and it is reported that construction on the line from Navasota to Madisonville will begin immediately. Leroy Trice is general manager; office at Palestine, Texas.

New Orleans, La.—Contracts for building the road of the New Orleans & Southwestern Railway from New Orleans to Montague have been let to Garvey, McGhee & Co. of St. Louis. The line is seventy-seven miles long. C. R. Young is general manager; office at Thibodaux.

New York, N. Y.—President Samuel Spencer of the Southern Railway is quoted as saying that the Occidental Construction Co., of which he is one of the incorporators, is to build an independent railroad on the west coast of Mexico. Mr. Spencer's office is at 80 Broadway, New York.

Opelika, Ala.—Boston capitalists interested in the plan to establish a hotel at Wright's Mill will, it is understood, apply for a franchise for a street railway. H. D. Capers of Auburn, Ala., is counsel for the syndicate.

Portsmouth, Va.—Tracklaying has begun on the James River Railroad from Portsmouth towards Suffolk. H. L. Maynard is president.

Portsmouth, Va.—Mr. J. M. Barr, vice-president and general manager of the Seaboard Air Line Railway, writes to the Manufacturers' Record: "There is no foundation for the statement that this road has entered into arrangements for the erection of a union station and terminals at Norfolk. I do not think any road entering Norfolk is a party to the alleged arrangement."

Radford, Va.—The Radford Southern Railway & Mining Co. is reported to have been sold to the Norfolk & Western Railway Co., while the former stockholders have arranged with the purchasers for the building of twenty-six miles of line through Smyth and Grayson counties as an extension of the Marion & Rye Valley Railroad. L. E. Johnson is general manager of the Norfolk & Western; office at Roanoke, Va.

Richmond, Va.—The Manufacturers' Record has obtained the following information from an authoritative source: The Chesapeake & Ohio Railway has begun building the Big Sandy Railway from Whitehouse, Ky., up the Levisa and Russell forks of the Big Sandy river, through the "Breaks of Sandy," on the State line, into Dickenson county, Virginia, to the mouth of Pound river. The line will open up valuable coal territory. Contractors are at work. C. E. Doyle is general manager; office at Richmond, Va.

Salisbury, Mo.—The St. Louis & Northwestern Railroad Co. has been incorporated to build a line from Brookfield to connect with the Missouri, Kansas & Texas Railway near Mokane, in Callaway county, 100 miles long. The directors are J. H. P. Baker, D. R. Patterson, H. G. Marquis, D. F. Vincent, N. B. Palmer, T. R. Hamilton, R. W. Sweeney, H. T. Juttner and T. J. McGibb, all of Salisbury.

Sour Lake, Texas.—Arrangements have been completed, it is reported, for the building of a branch from the Southern Pacific to Sour Lake Springs. W. G. Van Vleet is general manager; office at Houston, Texas.

St. Louis, Mo.—Mr. C. B. Eames, president of the Tuxpan Valley Railroad Co., Ltd., of Mexico, writes to the Manufacturers' Record confirming the report that the company has secured a concession to build a railroad from the port of Tuxpan, seventy miles inland, and to connect with the Mexican Central's Tampico extension. Mr. Eames' office is at St. Louis.

Thomasville, N. C.—It is reported that work is to begin immediately on the proposed Thomasville & El Dorado Railroad.

Vinita, I. T.—The Missouri, Kansas & Texas Railway has, it is reported, temporarily abandoned construction of its proposed Wyback extension to Bartlesville, farmers having refused to sell their growing crops. A. A. Allen is general manager; office at St. Louis.

Washington, D. C.—George E. Emmons of Washington has bought the Chevy Chase & Kensington Electric Railway, and will, it is reported, make improvements.

Welch, W. Va.—Walton & Luck have the contract for constructing the railroad of the Cherokee Colliery Co. at the head of the North Fork branch.

#### Street Railways.

Alexandria, La.—J. C. Allen and Western capitalists, it is understood, propose to build an electric belt line railway four miles long in Alexandria.

Florence, Ala.—The city council has granted a franchise for an electric street-car line to J. T. Crass of Chattanooga, Tenn.

Jacksonville, Fla.—The Jacksonville street railways have been purchased by the Stone & Webster Company of Boston. George J. Baldwin represents the company, and is quoted as saying that it will spend \$150,000 in improvements.

Sheffield, Ala.—The city council has taken favorable action on the petition of C. B. Ashe for a street railway franchise.

Wheeling, W. Va.—John B. Wilson, attorney for the Ohio Rapid Transit Co., is quoted as denying the report that it has been absorbed by the Wheeling Traction Co.

#### Machinery, Proposals and Supplies Wanted.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

Air Compressor.—Eutaw Water-Works, Electric & Power Co. wants air compressor, 12x14 cylinders; wants prices delivered.

Boiler and Engine.—Belle-Pre Bottle Co., Columbian Building, 416 Fifth street N. W., Washington, D. C., will need 60-horse-power boiler and engine.

Boiler and Engine.—See "Cotton Ginnery."

Boilers and Engines.—Venable Bros., Atlanta, Ga., want 200-horse-power Corliss engine, two 100-horse-power boilers and water heater for same.

Bowling Alleys.—Edwards & Walter, 10 Kendall Building, Columbia, S. C., want catalogues and prices of double-track bowling alleys.

Building Material.—D. W. Jacobs, Clarksburg, W. Va., wants to buy a carload of poplar or hemlock laths.

Canal Work.—Brooks Bros. & Co., care Dutton Hotel, Beaumont, Texas, are ready to let contract for twenty-five miles of canal work.

Cement-works Equipment.—V. Cascino, Box 211, Mexico City, Mex., wants proposals to equip Portland cement factory, 50 or 100 tons daily capacity, hydraulic power. Cement to be made by dry process from hard limestone and very soft clay, containing iron oxide.

Cotton Ginnery.—C. J. Cone, Lodge, S. C., wants prices on two cotton gins of seventy saws each, 30-horse-power return tubular boiler, 25-horse-power center-crank engine, elevator, grits mill, rice huller and stave saw.

Crushing Plant.—See "Mining Equipment."

Drugs.—Universal Remedy Co., I. Nowakowski, manager, Brenham, Texas, will need crude drugs.

Electric-light Plant.—Swift Cotton Mill, Elberton, Ga., will buy electric-light plant (dynamo and engine connected preferred).

Electric-light Plant.—City of Tallahassee, Fla., will contract for electric-light plant; \$16,000 available. Address Louis C. Yaeger, chairman of light committee.

Electric-light Plant.—City of Dunn, N. C., will buy 30,000 feet cast-iron pipe, eight, six and four-inch; two boilers, fifty horse-power each; engine of fifty horse-power; will drill eight-inch well 200 to 300 feet, erect tank of 50,000 gallons capacity, standing on trestle 100 feet high; also buy equipment for twenty-five arc lights and wire for 700 incandescent lights.

Electric Power.—See "Iron Works."

Engine.—See "Paint Works."

Engine.—Atlantic Shook & Lumber Co., C. W. Rockefeller, president, Berkeley, Va., wants 250 to 350-horse-power engine, Corliss preferred.

Fertilizer Machinery.—J. W. Zink, Orange Grove, Miss., wants machinery and full information for manufacturing fish oil and fish fertilizer.

Fish-oil Machinery.—See "Fertilizer Machinery."

Flour Mill.—W. J. Meyers & Bro., Troy, Tenn., will need flour-mill machinery, excepting boiler and engine.

Gas Plant.—See "Lighting Plant."

Grain Mills.—See "Cotton Ginnery."

Heating Plant.—J. C. Morris, Greensboro, N. C., wants hot-air heating plant for nine-room house.

Ice Plant.—Box 43, Statesville, N. C., wants catalogues and prices on ice plant and cold-storage machinery.

Iron Founders.—Hanna & Kalmbach, New Orleans, La., want addresses of companies manufacturing small gray-iron castings weighing one to four pounds.

Iron Works.—A. M. Gibbs, treasurer Co. Iumbia Machine and Iron Works, Columbia, S. C., will need equipment for iron works, including electric power.

Knitting Machinery.—E. R. Horton, Lowndesville, S. C., will want knitting machines, roofing, siding, turbine wheel, steel flumes, etc.

Lighting Plant.—Rev. H. S. Nagengast, Gardenville P. O., Md., wants full particulars regarding lighting plants for dwellings, especially acetylene-gas systems.

Mill Supplies.—H. C. Townsend Cotton Mill, Anderson, S. C., will need shafting, hangers, pulleys, belting, 750-gallon underwriters' fire pump and other supplies.

Mining Equipment.—East Tennessee Mining & Development Co., Fall Branch, Tenn., wants plant for crushing dolomite containing zinc blende; to have rolls, daily capacity of 100 tons, not less than 20 mesh fine; second-hand in first-class condition will do.

Oil-fuel Apparatus.—Geo. F. Payne, 43½ Whitehall street, Atlanta, Ga., wants addresses of makers of furnaces for burning crude petroleum oil (both for steam boilers and heating plants).

Painting Machines.—Wallach Bros., 57 Grace Church street, London, E. C., England, wants addresses of manufacturers of portable compressed air plants for painting by machine.

Paint Works.—Val-Blatz Paint & Varnish Co., Louisville, Ky., will need 60-horse-power engine, lead and paint mixers and lead and paint mills.

Paper Mill.—J. W. Wellington, Jennings, La., wants information concerning manufacture of wrapping twine, especially with reference to utilizing rice straw refuse from a paper mill now operating; wants to evaporate, distill, cremate or otherwise dispose of paper-mill refuse to prevent dumping into watercourse.

Railway Equipment.—De Louch Mill Manufacturing Co., Atlanta, Ga., wants several tons of 16-pound steel rails, new or second-hand.

Roofing.—See "Knitting Machinery."

Steam Specialties.—G. N. Henson, Chattanooga, Tenn., wants two feed-water heaters and purifiers of 400 to 500 horse-power (Stillwell-Bierce & Smith-Valle preferred); second-hand.

Stone-crushing Plant.—J. C. McMichael, Glovers, Ga., wants to let contract for crushing about 375,000 cubic yards of stone; contract will probably be increased to 500,000 yards.

Varnish Machinery.—See "Paint Works."

Water Supply.—See "Windmill."

Water-wheels.—See "Knitting Machinery."

Water-works.—Laufketter-Bondt M. E. Co., 810 Olive street, St. Louis, will need deep-well pumps, fire pumps, boilers, feed-water heater, hydrants, gas iron pipe, valves, etc.

Water-works.—Sam T. McMurtry, recorder, Muskogee, I. T., will open bids July 23 for furnishing material and constructing water-works plant, in accordance with plans and specifications. Separate bids will be considered for building tunnel or pipe line 2500 feet long under river; distribution system, including ten miles of pipe, power plant, brick house, etc., standpipe 120x25 feet, sewerage system and disposal works, cast-iron pipe, hydrants, valves and two 1,500,000 gallon pumps. Burns & Donnell, Postal Telegraph Building, Kansas City, Mo., prepared plans and will furnish pamphlet of information.

Water-works.—See "Electric-light Plant."

Well-drilling Machinery.—John H. Bartlett, president East Tennessee Mining & Development Co., Fall Branch, Tenn., wants machinery for well-drilling capable of going 3000 feet; second-hand in first-class condition will do.

Well-drilling.—Ed. McCulloch, Mooreville, Texas, wants bids on boring artesian well.

Well-drilling Machinery.—Walden Oil & Gas Co., Elkhart, Ind., will probably want rig for drilling 2000 feet.

Windmill.—Rev. H. S. Nagengast, Gardenville P. O., Md., wants catalogue and prices on windmills for water supply from wells; full information is requested.

Windmills.—J. W. Zink, Orange Grove, Miss., wants windmills for pumping and other power.

Woodenware Machinery.—Dorchester Butterdick & Manufacturing Co., Cambridge, Md., will need veneer, pattern and stapling and automatic butterdick machines, and Sturtevant fan.

**Woodworking Machinery.**—Snyder Wagon Co., Shreveport, La., will need band saw, buzz planer and general woodworking machinery.

**Woodworking Machinery.**—Southern Lumber & Supply Co., Tampa, Fla., wants double surfacer, not less than twenty-four inches.

**Woodworking Machinery.**—See "Cotton Ginners."

### TRADE NOTES.

**Orders for Ice Machines.**—Orders for installations of ice machinery of various styles and sizes have recently been placed with the York Manufacturing Co., York, Pa. This company has just booked orders for refrigerating machinery ranging in capacity from 6 to 100 tons from Massachusetts, West Virginia, Kansas, Louisiana, Virginia and Cape Cruz.

**Removal.**—The Howe Manufacturing Co., Louisville, Ky., manufacturer of valves, injectors and other steam specialties, has recently moved into a new plant at an expense, including the cost of new machinery, of \$75,000. It is expected that the new works will be in full operation by the middle of July. This company has acquired control of the "Gem" and "Easy" injectors.

**A Testimonial.**—Mr. Roy J. Rivers, superintendent of the Minneapolis Milling Co., after using a can of "Albany" grease and the grease cup furnished gratis with it for introduction by Adam Cook's Sons of New York, writes: "I am using less grease, and there is less heating than with any grease I have ever used." The quality of goods sold by Adam Cook's Sons is well known.

**Automatic Towing Machine.**—The Shaw & Spiegle automatic steam towing machine, built solely by the American Ship Windlass Co., Providence, R. I., promises to be a machine of the utmost value. Sudden strain on hawsers are made impossible by means of it; the distance between tug and barge is lessened or increased at the will of the operator. The machine should greatly lessen the number of barges lost at sea through parting cables.

**Apex Company's Promptness.**—Notice has been received from the Apex Equipment Co., 11 Broadway, New York, of the shipment two days ahead of time of the first instalment of the order for 100 cars placed by the Lackawanna Iron & Steel Co., Buffalo. The Apex Company, for its promptness in making shipment, as well as the class of its work, is making for itself a reputation. This firm does a large manufacturing and jobbing business in all lines of machinery.

**Crushing Plants for Sale.**—When the full output of a plant is engaged for years ahead, bound down by a contract, that plant is in good condition, and has only to produce. At this time two such plants may be bought cheaply. Two complete crushing plants—one near Columbia, S. C., with a five-year lease on the quarry, and a contract with a railroad company to take all ballast, the machinery being new and in good condition; the other near Elberton, Ga., in the same condition—are for sale by the Ethridge Granite Co., Elberton, Ga., with or without lease.

**Brick Plant for Sale.**—An advantageously situated fire-brick concern on the Philadelphia, Wilmington & Baltimore Railroad, North East, Cecil county, Maryland, fifty miles from Philadelphia and Baltimore, is being offered for sale in three lots by Robert C. Thackery, assignee, Elkton, Md. All necessary machinery for the production of fire-brick and lining is in the establishment, and in good condition; fire-clay is abundant in the immediate vicinity. The location affords easy access to the cities mentioned by either rail or water. The sale takes place at Elkton July 22.

### TRADE LITERATURE.

**Large Stock.**—If in need of small channels and angles, half-inch and larger, for railings and other work, write to Bourne-Fuller Company, Cleveland, Ohio, for its latest stock list, which is issued monthly.

**Coaling at Sea.**—Coaling war vessels at sea is a matter of vast importance at times, and attended ordinarily with considerable difficulty. An illustrated description of the Lidgerwood-Miller marine cableway, as installed on the Illinois by the Lidgerwood Manufacturing Co., 96 Liberty street, New York, is contained in a leaflet under the title heading this note. If the men on the collier can load fast enough the war vessel coals at the rate of sixty tons an hour by means of this system. The collier is in tow and the coal is hauled from her hold over the cableway by machinery on board the man-of-war.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office Manufacturers' Record,  
Baltimore, Md., July 1.

A feature of interest in the Baltimore stock market during the period from June 26 to July 1, inclusive, was a revival of interest in the securities of the Mt. Vernon-Woodberry Cotton Duck Co., the first mortgage 5 per cent. bonds advancing on limited trading. There was some falling off, only of a fractional nature, however, in the price of the Cotton Duck income bonds, but without particular reason. Current reports state that the earnings of the company continue excellent, but the board has not yet vouchsafed any information regarding its probable action in relation to the payment of interest on these securities for the first half of the calendar year. Inasmuch, however, as the mortgage does not require the interest to be paid before August 15, there is plenty of time yet for action upon the question.

There has been, as usual, a liberal amount of trading in United Railways issues, particularly in the income bonds, which held steady, there being practically no movement in them. The first mortgage 4 per cent. bonds were also steady at unchanged figures, but there was little doing in the stock. Light & Power stock and bonds were higher and stronger.

Notwithstanding the comfortable weather which has prevailed, and the fact that very few persons have yet left the city, a touch of midsummer dullness seems to have settled upon the market, there being very little movement to any of the favorite speculative stocks and bonds, changes being confined within fractional limits.

In the trading United Railways common sold at 16 and 16½; the income bonds at 69½ and 69¾; the first mortgage 4 per cent. at 96½ and 96¾. The preferred stock of the United Electric Light & Power Co. sold at 40½ to 42; the 4½ per cent. bonds between 85 and 87½. Consolidated Gas changed hands at 69 to 70; the 6 per cent. bonds at 114½, and the 5 per cent. bonds at 116½, and ex-interest at 112 and 114½, respectively. There was no trading in Seaboard common stock, but the preferred sold at 44½ and 44¾; the 4 per cent. bonds advanced from 85½ to 85¾, and the 5 per cent. from 103½ to 103¾. Cotton Duck common sold between 10½ and 10¾, and the income bonds between 47½ and 48, while the 5 per cent. rose from 82½ to 83½. G. B. S. Brewing common sold at 17 to 17½; the income bonds between 44½ and 44¾, and the firsts at 53¾.

The trust-company group of stocks was comparatively neglected, only a few issues appearing in the dealings. International Trust sold at 120¼; United States Fidelity & Guaranty at 150; Maryland Casualty at 53, and Union Trust at 65. Howard Bank sold at 12½; Mechanics' at 32, and Third National at 128.

Other securities traded in were as follows: Atlantic Coast Line common at 135, 149 and 149½; Atlantic Coast Line of Connecticut, 260 to 269; Georgia, Carolina & Northern 5s, 114¼ and 114½; Anacostia & Potomac 5s, 99½ to 100; City & Suburban 5s (D. C.), 99½ to 101¼; Canton Company stock, 102¾ and 104; Virginia Railway & Electric Development 5s, 98½ to 99½; Charleston & Western Carolina 5s, 115; Wilmington, Columbia & Augusta 6s, 113½; Knoxville Traction 5s, 100; National Enameling preferred, 85;

Virginia Midland 2ds, 115½; do. 3ds, 121; Georgia & Alabama Consol. 5s, 115½; Georgia Southern & Florida 5s, 116; Alabama Consolidated Coal & Iron stock, 16 to 16½; Maryland Telephone 5s, 90; Carolina Central 4s, 100; Lexington Street Railway 5s, 103½; Nashville Railway 5s etfs., 63 to 64; Northern Central Railway stock, 118; Georgia Pacific 1sts, 127; North Baltimore 5s, 120¼; Atlanta Street Railway 5s, 105½; West Virginia Central 6s, 113, and City & Suburban 5s (Baltimore), 114½.

### SECURITIES AT BALTIMORE.

Last Quotations for Five Days Ended July 1, 1902.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte.....	100	167	170
Georgia Southern & Florida.....	100	48	...
Georgia Sou. & Fla. 1st Pref.....	100	100	...
Georgia Sou. & Fla. 2d Pref.....	100	83	85
United Railways & Elec. Co. 50	16	16½	...
Seaboard Railway Common.....	100	25	25½
Seaboard Railway Preferred.....	100	44½	44¾
Atlantic Coast Line of Conn.....	100	269	270

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank.....	10	32½	33
Commercial & F. Nat. Bank.....	100	120½	140
First National Bank.....	100	125	...
German Bank.....	100	106½	...
National Bank of Baltimore.....	100	130	131½
National Howard Bank.....	10	11½	...
National Marine Bank.....	30	37	...
National Mechanics' Bank.....	10	32	...
National Union Bank of Md.....	100	118½	...
Second National Bank.....	100	130	...
Third National Bank.....	100	125	126

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
Colonial Trust.....	50	28½	30¼
Continental Trust.....	100	...	221
Fidelity & Deposit.....	50	...	164½
International Trust.....	100	129	130
Maryland Casualty.....	25	52	53
Mercantile Trust & Deposit.....	50	165½	168
Union Trust.....	50	64	65
U. S. Fidelity & Guaranty.....	100	149½	150¼

Miscellaneous Stocks.	Par.	Bid.	Asked.
G. B. & S. Brewing Co.....	100	17½	17¾
United Elec. L. & P. Pref.....	50	41¼	42½
Cotton Duck Voting Trust.....	10	10	10½
Consolidation Coal.....	100	...	82
George's Creek Coal.....	100	115	...
Consolidated Gas.....	100	68½	69
Atlantic Transport.....	100	252	...

Railroad Bonds.	Par.	Bid.	Asked.
Char., Col. & Aug. 1st 5s, 1910.....	100	123	...
Char., Col. & Aug. 2d 7s, 1910.....	100	110	...
Columbia & Greenville 1st 6s, 1916.....	100	118½	121
Georgia, Car. & North. 1st 5s, 1929.....	100	112	113
Georgia South. & Fla. 1st 5s, 1945.....	100	113	...
Georgia Pacific 1st 6s, 1922.....	100	126¾	127¼
Raleigh & Augusta 1st 6s, 1926.....	100	121½	123
Seaboard & Roanoke 5s, 1916.....	100	112½	116
Seaboard & Roanoke 5s, 1926.....	100	111½	...
Southern Railway Con. 5s, 1994.....	100	121	...
Virginia Midland 1st 6s, 1906.....	100	108	108½
Virginia Midland 3d 6s, 1916.....	100	120½	...
Virginia Midland 4th 3-4-5s, 1921.....	100	111	...
Virginia Midland 5th 5s, 1926.....	100	116½	...
West Virginia Central 1st 6s, 1911.....	100	116	...
Wilmington, Col. & Aug. 6s, 1910.....	100	113	114½
Wilmington & Wel. Gold 5s, 1935.....	100	123¾	...
Charleston City Railway 5s, 1923.....	100	104½	...
Charleston Con. Electric 5s, 1909.....	100	94	95
Knoxville Traction 1st 5s, 1928.....	100	100¼	...
Newport News & Old Pt. 5s, 1938.....	100	109¼	...
Norfolk Street Railway 5s, 1944.....	100	113	115
United Railways 1st 4s, 1949.....	100	96¼	96½
United Railways Inc. 4s, 1949.....	100	69½	69¾
Seaboard 10-year 5s.....	100	87½	87¾
Georgia & Alabama Con. 5s.....	100	102¾	103¾
Augusta Ry. & Electric Co.....	100	115¾	115¾

Miscellaneous Bonds.	Par.	Bid.	Asked.
Mt. V. & Woodby Cot. Duck 5s.....	83¼	83¼	...
Mt. V. & Woodby Cot. Duck Inc.....	47¼	47¼	...
G. B. & S. Brewing 1st 3-4s.....	53¾	54	...
G. B. & S. Brewing 2d Income.....	44¼	45	...
United Elec. Light & Power 4½s.....	87½	88	...
Consolidated Gas 6s, 1910.....	112¼	112½	...
Consolidated Gas 5s, 1939.....	114½	114½	...

### A Large Deal Closed.

Negotiations have been closed in the deal for supplying the United Railways Co. of Baltimore with electricity generated at a plant to be built on the Susquehanna river and operated by the power of that stream. An agreement was closed between the Continental Trust Co. of Baltimore and the United Railways & Electric Co. for the sale of the United Electric Light & Power Co. and of the Mount Washington Electric Co. to the trust company, which is to designate the power company (supposed to be the Susquehanna Electric Power Co.) which is to build the river plant. The price paid for the two electric plants is understood to be about \$900,000, of which \$150,000 is for the Mount Washington plant. The common stock of the other plant, in Baltimore city, is \$2,000,000, par value at \$50 per share, which would indicate this stock is to be taken at about \$18.75 per share.

The trust company, which is generally understood to be acting for a syndicate, is to deposit \$25,000 forfeit with the United Railways & Electric Co. if it does

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not complete the deal by November 15, 1902.

The United Electric Light & Power Co. has also preferred stock amounting to \$700,000 and 4½ per cent. bonds of \$3,128,000.

[For Additional Financial News, See Pages 38 and 39.]



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